

MIND

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OF

PSYCHOLOGY AND PHILOSOPHY

I.—A DEFENCE OF IDEALISM.

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AMONG the various forms of difference and opposition in the methods and results of reflective thinking, which have been consecrated and emphasised by the names attributed to so-called "schools of philosophy," there is one of especially long-standing and of more than ordinarily fundamental character. This opposition reaches its extreme in those systems which are considered, on the one hand, to merit the title of an absolute or monistic Idealism and, on the other hand, of a mechanical and materialistic Realism. But it is in this very extreme that the opposition itself seems to suffer a kind of *reductio ad absurdum*. For the more complete and absolute the monism, the more thoroughly has the attempt been carried out to idealise the *real Universe*, or that totality of beings and events of which man has actual experience; and to which, whether it be physical or psychical, the positive sciences are compelled to give a quasi-mechanical exposition. The more self-sufficing and self-explanatory the mechanism itself is assumed or proved to be, the more completely is it endowed with the most distinctive characteristics of unchanging or temporarily regnant *human ideals*. Thus the God of monism may be as closely identified with the mechanism of the material universe as the reality dubbed Nature by scientific materialism is identified with the perfect ethical Spirit of monotheistic religion.

If we seek for the purest and most extravagant form of monistic idealism we must go to India. Only the One Ideal is truly real: all particular realities exist only as its ever-changing and rapidly fleeting ideas. To the inquirer after the true account of the concrete existences of which we

mortals have daily experience, the Ideal One replies : " Earth, air, fire, water, space, mind, understanding, and self-consciousness—so is my nature divided into eight parts. But learn now my higher nature, for this is only my lower one. . . . I am the creator and destroyer of all the world. Higher than I am is nothing. On me the universe is woven like pearls upon a thread. . . . I am the inexhaustible seed. I am immortality and death. . . . I am knowledge. There is no end of my divine manifestations."

As I have said elsewhere (*Knowledge, Life, and Reality*, p. 49): " This impassioned and mystical cry of an idealistic monism sounds to the Western ear like a demoniac call on reason to fling itself from the rock of reality into a bottomless abyss shrouded in impenetrable mist. And from it, or from any invitation resembling it, modern scientific realism turns away to accept the embraces of an all-creating and all-explaining Ether, or some other quasi-material principle. In its extreme form, however, almost every word just quoted as descriptive of the ancient Indian Idealism might be put into the mouth of the apostle of the modern Western Realism. We say 'in its extreme form'; that is, when this realism assumes to have discovered in Matter, or in Ether, or in a Being of the World which somehow mysteriously combines the qualities of both, an adequate explanation and a 'soul-satisfying' interpretation of the totality of human experience."

In this connexion it is pertinent to call attention to the prevailing tendency to reduce the explanation of things, and of minds as dependently connected with things, to a system of mathematical abstractions which relate to the correlated forms of energy, of which the all-pervading ether is the vehicle, or substance, or ground. This is the celebrated dynamic theory of reality. But so far has this substance itself been idealised that it resembles a motionless and immovable vacuum regarded as a sort of theatre for a system of abstract formulas. And now, if we are going to get anything actually done, as in a real world upon this stage, we must still further idealise this mathematical and mechanical system; we must virtually convert it into a unity of active ideas or ideating wills. And then we seem, under the guidance of the latest realistic speculations, to have swung round the metaphysical circle so far that we can dimly descry through the mist the ghostly form of Père Malebranche's theory of "seeing all things in God".

All the way below these extremes, the attempt to draw fixed lines between the various schools of realism and the

equally varied schools of idealism is baffled by the recognition of the fact that their agreements are really more important than their differences. Indeed, much of the controversy between them may be reduced to logomachy, or else to a somewhat unproductive and misplaced emphasis on differences in the way of stating essentially the same truths. Nor is the case conspicuously altered when we consider the opposition as one of points of view, of method, or of appeal to different kinds of human experience. As to the point of view, if we adopt that of the most naïve and crude realism, with its haste to solve the problems of science in terms of sense-perception, its trust of common sense, and its scorn of metaphysics, we discover that the moment such realism becomes controversial and puts itself into opposition to an equally naïve and crude idealism, it is obliged in some measure to come over to the latter's point of view. Otherwise the two forms of reflective thinking move along planes so far apart that either a clashing or a friendly meeting is impossible between them. For example, the most realistic theory of visual perception cannot oppose the most extreme form of subjective idealism, in its treatment of the same subject, without each consenting in some measure to take the other's point of view.

As to essential differences in method between these two schools, the very thing is made impossible by the nature of reflective thinking, the one organon of all systematic philosophy. For each of these schools of philosophy, and all philosophy, whatever the name of the school it may bear, is dependent upon the growing body of knowledge which we call the sciences, for the ascertainment, testing, and comparison of the facts that are the warp and woof of that pattern of Reality which appears in human experience. There is, however, only one way of converting these facts into the attempt at systematic philosophy. And this is the way of rationalism, the method of reflective thinking.

It is undoubtedly true that from time immemorial the different types or schools of philosophy have been accustomed to make their appeal, too exclusively, to some one of the many and indefinitely varied sides of experience, whether of the individual or of the race. To this fact we owe both the reproach and the pride of true philosophy. As its critics are fond of saying: It has never arrived at any general agreement in its conception of the Universe, or in the solution it has to offer of the major problems of ethics, æsthetics, or religion. And so far as this criticism is chargeable to the pretence, the jealousies, the unseemly wranglings of philosophers, it is

indeed a reproach to philosophy. But Reality, in the large, so to say, is too vast to be compassed by human thinking; and it is, in fact, rich enough in quality to satisfy all the demands made upon it from every quarter, and during all time, as an explanatory principle; while the pride of the life of philosophy and the indispensable condition of its progress are inseparately dependent upon the variety and the unceasing growth of the different types and schools of reflective thinking.

There never, therefore, has been a form of so-called realism which was not essentially idealistic in the character of its philosophical tenets. And no attempt at a system of idealism can be made which does not take its point of departure from that which is actual in human experience, that is, from the real as envisaged or implicated in every cognitive judgment; and which does not find itself compelled to return to reality over and over again, in its answers to objectors and in its efforts at self-vindication.

In illustration of the statement just made we may confidently appeal to the history of philosophy, especially in the more sober lines of its Western development. The water which Thales made the principle of a "creative evolution" was not mere water: it was the rather, as says Zeller, conceived of as "an efficient force," and "in the spirit of the old natural religion as analogous to living forces, as is seen in the assertion that all is full of gods, and that the magnet has a soul—i.e., life—since it attracts iron". The air out of which Anaximenes would build the world, including human spirits, was not just such air as men around him were breathing every moment of their actual lives, not common air, such as is known to modern science as a combination of oxygen and nitrogen, sprinkled with various other physical ingredients and holding many noxious germs in suspension. By rarefaction this ideal air could become fire, and could even be transmuted into a sort of all-embracing world-soul. The realities which modern pragmatism and the "new realism" allow to exist in actuality and in a state of quasi-independence of ideas, are not mere things as immediate perception indubitably cognises them. On the contrary, they are to a high degree idealised—or, may we not say? in not a few instances, vaporised.

Most emphatically is all this true of the one all-embracing, all-creative Reality, the Being of the World, out of which the modern physical sciences would create, and by which they would explain, our actual experience with the concrete existences of minds and things. No construct of the imagin-

ation, demanded by art or by religion, is more purely ideal than is this Universe when regarded under the terms of modern mathematical and experimental physics. Monotheistic religion has never made more exhausting demands on our idealising faculties; nor has monistic philosophy ever asked the mind to group together in some kind of harmonious relations, to form its ideal of the Absolute, more conflicting, not to say contradictory forms of conception. Speaking truly, What more transcendent Ideal, both to inspire and to perplex the average mind, can possibly be proposed than that which is proposed by the latest and most highly developed scientific realism? God, or Ether, which is the easier to conceive of as the immanent Source of so-called "creative evolution"?

Let us now, however, address ourselves to the brief illustration of the other side of our two-sided contention. In the line of our Western standing, subjective idealism began with the Sophists, those ancient pragmatists, who so imperfectly comprehended the ground on which they thought they were so firmly planting themselves. Even in this early time, the wordy conflicts of philosophy, and the boldness with which the use of the rationalistic method had come to oppose all the most immediate testimony of common-sense as to the nature of things, had created a deep distrust of existing attempts to explain the physical universe. Objective knowledge by rational methods was declared to be impossible. Objectively true science was beyond the reach of human faculty, which cannot pass beyond subjective phenomena. What then remains for the wise man to do? To abjure metaphysics and to devote himself to that which is practical. But how shall one discover what is really practical? Why, by abjuring the claims of reason to pronounce upon the abstract principles, or metaphysics, of ethics, and by limiting inquiry to what "works" as a matter of fact in the conduct of the practical life. Thus we return to find in certain facts of human experience a foundation for a sort of philosophy. We flatter ourselves that we have passed over from the scepticism bred of rationalism to a tenable form of realism.

The classic type of idealism through all the history of Occidental philosophy has been, and still is, Platonism. Combined with any attempt at sobriety of thinking, idealism can no farther go. But after all, one of the most characteristic things, perhaps the most characteristic thing, about the Platonic idealism is its earnest, patient, and persistent attempt to place itself firmly upon a basis of admitted facts. It proposes to apply a species of the rationalistic method, the so-called dialectic, to the discovery and interpretation of the

realities disclosed in human experience. Only, the experience to be examined and interpreted is the experience of the Self in social relations with other selves. What is mere matter of fact is to be found in the imperfect and often false conceptions of men, as these conceptions lie asleep or are buried in consciousness, or as they are exemplified in the conduct of life. The truth about reality which these conceptions convey consists, however, in the ideals which the conceptions embody. And when these ideals are systematically arranged under the supreme Ideal of the Good, if the truth that ideals can have actuality only in personal consciousness is recognised more clearly than Plato ever recognised it, then Platonism is brought into essential agreement with the idealism of modern monistic philosophy and monotheistic religion.

It is in the *Timæus* chiefly that Plato allows his idealising genius to leave behind all solid ground of experience and run riot with wild dreams as do the brains of men when intoxicated by opium or nitrous oxide. But in Plato's time there was no real basis for speculations such as that to which the *Timæus* is devoted. Throughout the Dialogue the author has the air of one indulging in the pastime of imagination, without serious claim to depict events as they actually took place in a real space and in real time. With the belief that the principle which controlled the processes of creative evolution must be thought of as realising an ideal good in and through all these processes, Plato announces a conclusion from which modern idealism will, in general, not wish to dissent.

Nor was this typical form of extreme idealism unwilling to meet occasionally the ever-just demand of realism that there shall be a perpetual return to fact for the testing of all our ideals. Even in the sphere more completely under the control of human wills, Plato felt the need of proving his ideals by referring them back to the facts of actual experience. Thus Erdmann, in commenting on the difference between the *Republic* and the *Laws*, attributes it in part "to an increasing perception of the impossibility of attaining to the individual ideas in a purely dialectical way, and of descending from them to things. The desire of filling up the gap between the ideal and the real, which had induced him to obtain assistance from a science, mathematics, rooted only in *διάνοια*, causes him here also to lower his demands."

From Plotinus to Schelling, every form of absolute monism, in its deductive dealings with the most abstract conceptions as though they are the true and satisfactory explanatory principles of the vast multitude of individual things, must

make shift to place itself on a basis, however slender, of some experience of a realistic sort. Here the important thing is not that which this extreme form of idealism makes most prominent. It is not the occasional reality of states of intuition—intellectual, artistic, religious, etc.—from which these ideals are inductively derived. It is, rather, the ever-present, significant, intrusive and inescapable experience of the Self as a Will in relations of contact, agreement, or opposition, with other wills. For the most abstract ideas of philosophical monism, like those of the physical sciences, are not mere ideas. They are not barren ideals, but active, purposeful forces endowed with the reality of a will.

Since the progress of the positive sciences has made it more necessary that the different ventures in idealism as systematic philosophy should take their discoveries of what really exists and actually occurs into the account, the substitution of observation and experiment for deductive reasoning as a primary source of philosophy has gained in favour and in extent. Instead of a theology which derived its constitution from a mixture of Greek and Oriental speculations, with an appeal to the realities of religious experience by way of the intuitions of a specially privileged class, we have now a mysticism which relies for its claims to credence upon the more ordinary and constant experiences of all faithful Christian souls. Or if this idealism sets itself up as explanatory of Nature and able to interpret the causes and occurrences of the physical world, it can no longer face the positive sciences with a demand for unrestricted licence in the construction of its ideals. In his time, no one more than the dreamer Paracelsus insisted upon the principle of the interdependence of all particular things; and upon the necessity of carefully observing all natural phenomena, from the movements of the stars and constellations to the succession of crops. "Amid all the assertions which appear so fantastic, he is never tired of warning his readers against fantasies, and of demanding that Nature should be allowed to point out the way." At present, no class of thinkers is more deferential toward the modern chemico-physical sciences and toward positive studies in history, economics, social development, ethics, art and religion, than are the leaders of idealism as systematic philosophy. The narrowing of the field, the surface culture of it, "cock-sureness" as to the character of the soil, as to the values of different patent fertilisers, and as to the efficiency of different workmen, are not especially characteristic of any of the now active types of idealism. Indeed, some of them, at least, may lay just claim to superior

insight into how truth "works" for the conduct of the practical life, and into what is "really real," as distinguished from what is seemingly so.

These picked and fragmentary illustrations from the history of reflective thinking might be extended at indefinite length. But they are intended only as illustrations of a contention which can be established firmly on other grounds. This contention may now be stated in the following way: Realism and Idealism, as systems of philosophy, cannot properly be opposed as rival schools, entitled in a polemical manner to contend for adherents that are willing to be enrolled under either one of the two, to the exclusion of the positive tenets of the other. Or, as stated in different terms: All systematic philosophy is, essentially considered, some form of idealism. On the other hand, if it should wish to become, or to masquerade as being, a quite pure form of idealism, no system can escape the necessity of starting its process of philosophising from, and in the continuance of this process, of constantly returning to, the facts of experience as involving the cognition of concrete realities. For the supreme task of philosophy is so to shape and harmonise the ideals of humanity that they shall more perfectly correspond to, and more satisfactorily interpret, humanity's varied and unfolding experience of reality. Philosophy, essentially considered, is an ever-growing system of ideals; but of ideals verifiable by an ever-growing experience of reality.

Let the awkwardness and the temporary obscurity of the statements just made be pardoned while we examine the support they receive from an analysis of the processes involved in all reflective thinking.

Using the words in a broad and somewhat vague significance we may say that the sources of all our knowledge of what is real, lie in the concrete experiences of individual minds. There is no knowledge acquired except as some specific cognitive activity, taking place at a definite time and in some individual's consciousness. But every such cognitive activity is an experience involving reality. The act of knowledge is always some actual but fleeting state or change in consciousness; but it is always in and of some real being, mind or thing. It follows from this that we cannot understand—and *a fortiori*, cannot estimate—the claims, or the scientific value, or the practical influence, of either of these contrasted schools of reflective thinking, without understanding the sources in consciousness, and the conscious forms of functioning, out of which they perpetually spring. In other words, a psychological analysis of cognition is the indispens-

able propædæutic to an entrance even upon the threshold—and much more, to an avowed discipleship—of these, as of every other form of systematic philosophy. The fact that most advocates of modern realism have so little use for any attempt at a rational theory of knowledge is as suggestive as it is foreboding.

On entering upon an attempt at the required analysis, one of the most important preliminaries, as it seems to me, is to be on guard against the fallacies which lurk in the uses of that elusive and much-abused word "idea". This word is probably responsible for more fantastic psychology and more unsound philosophy than any other word in the English language. Nor can the careless use of the cognate or more strictly identical terms in every language into which man has set his efforts at philosophising, be excused wholly from the same fault. Much of his unsatisfactory doctrine of the "meaning of truth," and of the practical values and valid tests of truth, in the writings on these subjects of the late Prof. James, arose out of his habitual misuse of the word "idea". Ideas, whether we emphasise the part which imagination or the part which intellect has in their construction, whether we consider them as products of the representative faculty or of the logical faculty,—so-called images, receipts, or concepts,—*ideas*, as such, cannot properly be called either true or false. Ideas, as such, have the qualities of spontaneity, fixity, life-likeness, etc.; they may be associated and may be considered, for purposes of psychological theory, as furthering or hindering one another, after the fashion of the Herbartian school. But unless they are somehow or other caught and fixed in forms of cognitive judgment, we have no means of distinguishing the wildest and most grotesque fancies from the most sober realities, the smoke-dreams of idle hours from the inductions of the scientific laboratory or the reasoned conclusions of the philosopher. In insisting upon this we do no discredit to moral, artistic, or religious feeling; we put no contempt upon the instincts or insights of the most ignorant, or even upon the rambling and incoherent experiences of the infant or the idiot. Much less do we fail to prize highly those contributions to the knowledge of Reality which are constantly being made by the greater poets and artists. But *knowledge*—whether you call it sense-perception, just plain common-sense, or science, or philosophy—is born only when thinking has arrived at the pausing place of a judgment—a finished product of synthetic intellectual activity. And in saying this we return to the same conclusion at a point lower down, which was advo-

cated in a previous article (MIND, vol. xxii., N.S., No. 85) when rationalism was declared to be the only possible method of science and philosophy.

The same thing that has been said of ideas must be said of ideals, which are only a special class of ideas. Ideals, as facts of experience, as actual occurrences, have an undoubted existence. They *are*, as truly as are facts of perception or facts of memory. And in the history of human development, they have been very important and very influential facts. They have been most potent factors in stimulating and controlling every form of human activity, from the construction of the savage's canoe or rude piece of pottery to a symphony of Beethoven, a portrait of Rembrandt, the Inferno of Dante, or the teachings of Jesus. But as ideals, considered apart from the judgments which affirm or deny them of reality, they, too, are neither true nor false. Until the question has been raised, What does this particular form of idealism affirm to be existing in reality that corresponds to its particular ideal? the ideal itself has no meaning for truth. How, when, where, do you claim that your ideal has been, is now, or will be, realised? When the answer is given to these questions, then the truth of the answer as an interpretation of reality may perhaps be put to a decisive test.

As a matter of fact, realists and idealists, so-called, never argue about or criticise each other's views, as pure realists, or realists that have not already idealised the concretely actual, or as pure idealists, that is to say, idealists who claim no footing on the solid ground of an experience of the actual. The most radical realist will in general be found to be quite as much under the influence of unverifiable ideals as his sturdy opponent from the extremest school of idealism. On the other hand, the avowed idealist may have taken as much pains to keep close to reality in the forming of his ideals as has the scorner of all idealism in the name of the truth of reality. Indeed, the modern forms of realism, whether scientific and coldly intellectual or emotional and explosive, are pervaded by ideals which are unproved and, to say the best of them, questionable when brought to the test of human experience with concrete realities.

Neither science nor philosophy gets its knowledge of reality at first hand, so to say. Not a single, simplest conception limiting the classes of things, not a single so-called law describing their relations, changes, or modes of behaviour, has the authority of an immediate intuition in any human consciousness. What is true of things is true of souls. No classification or analysis of the mental operations or faculties,

no declaration as to the principles regulating or the causes producing any sort of psychical functioning, can claim any such authority. Still more incontestably true is this of all the larger conceptions of physical science, such as the conceptions of Law in general, of Unity, Order, Progress, Evolution, and the like. Of such *formule* touching all our experience with things, whether we consider them as wholly *a priori* or wholly *a posteriori*, or neither, or somewhat of both, the same statement must be made. Above all is this true of those lofty and comprehensive constructs of thought and imagination which are covered by such terms as Nature or the Universe, as these terms are customarily used by the modern sciences. These are all vast and vague ideals, formed in fitful and fragmentary way from an infinite number of contacts with, and impacts from, concrete and individual realities. Their increased authority for certitude, and extension in application, is as dependent upon the improved idealising capacity of the whole race of men as it is upon their ever-widening experience of the facts. Nothing would sooner or more completely kill all progress in both science and philosophy than to have the contentions of pragmatism and the new realism widely adopted and honestly applied. It is a comfort to know that there is not the slightest chance of this disaster to *ideals* being realised.

Nor is the case essentially different with the conceptions and laws of the psychological sciences. Whether we consider moral consciousness as chiefly feeling, or chiefly judgment, or, better, as involving both, sometimes in a harmony and sometimes in a diversity of mental attitudes toward a given piece of conduct, no science of ethics, or doctrine of what-ought or ought-not-to-be, in conduct or in character, can be shaped otherwise than in the form of ideals. The actual fact of feeling may be an inclination toward, or an aversion to, a slight or a more intense emotion of approbation or disapprobation; but in order to render the fact a contribution to ethical theory or a practical rule of conduct, it must be taken with other similar facts, and all viewed together in the light of moral ideals. Of all the conceptions and principles of art, the same thing is even more true. No construction that appeals to man's æsthetical consciousness can be explained or understood without more or less definite recognition of its controlling ideals.

But over all, as the supreme attempt of the intellect and imagination of humanity to interpret the total experience of the race with reality, stands the Ideal which monistic philosophy has called the Personal Absolute, the Infinite, or by

other similar terms; and which monistic religion has conceived of as perfect Ethical Spirit, or God. Instead, however, of this ideal being summarily rejected as a *mere* ideal, without foundation or verification in reality, it is entitled to the most respectful and serious consideration. It is, indeed, the highest, and intellectually most satisfying, and practically most valuable, of all human ideals. To substitute for it the incoherent conception of a "pluralistic universe" would be to take a long step backward on the road to intellectual barbarism. But like all ideals, and on account of its very nature more than any other ideal, it is an ever changing, ever growing, ever more exalted ideal. It expresses, and it alone with the same adequacy expresses, the ceaseless effort of the spirit that is in man, to interpret the Universe as environing and including human life. It is, therefore, more than any other ideal required and obligated to find its fitness and guaranty in all the facts of every sort and every side of human experience. But this experience of fact has never as yet been, and never can be, completed and fully realised. Reality is no finished affair, to be experienced or theoretically reconstructed by any age, much less by any individual, "in the lump," as it were. The world of things and of happenings is in a process of evolution. The rather must we say that it is some of the items of this evolution,—and only a few of them, at most—of which the race has experience as matters of fact. On this factual basis rests the evolution of the ideals of the race. Fitfully, fragmentarily, often mistakenly, the succession of minds that reflect have built up a more and more verifiable and practically available system of ideals. To bring any one of these ideals, or any particular way of systematising them, perpetually back to the test of verifiable factual propositions is the constant obligation of both science and philosophy. In this way only can idealism verify its claim faithfully to interpret and not to misrepresent reality.

Systematic philosophy, which is always and essentially some form of idealism, thus stands dependently related to the realism of "factual experience". By the latter confessedly uncouth term we intend to designate all that knowledge which seems to have the quality of immediacy, accompanied by a conviction of the indubitable reality of the object. Something is known to *exist in fact*, or to have happened *actually*—so we are accustomed to say; and not as matter of memory or imagination. But since the fact of the existence of the knower—here and now, and as the subject of this particular experience—seems an essential

part of all such immediate knowledge; and since the fact of the existence of something else which cannot be confused with the knower is an equally essential part of all cognitive activity; psychology has been accustomed to distinguish two kinds of so-called immediate knowledge. These have been called sense-perception, or the immediate knowledge of things through the senses, and self-consciousness or the immediate knowledge of Self by a process sometimes called "reflection". These two forms of cognitive activity have therefore been assumed to exhaust all the possible sources of knowledge as to what really is and what actually happens.

If we indulge ourselves, however, in a not inappropriate figure of speech, we may say that there are two ways in which rational beings of the human type may know, and actually do know, reality. For reality is not only *envisaged* in some of our experiences, but is also *implicated* in all experience. This distinction, with the claim that accompanies and grows out of it, is much more fundamental than that which divides all cognitive activity into "knowledge of" and "knowledge about". For there is positively no knowledge-of which is not also knowledge-about; and knowledge-about adds ever increasing increments to our knowledge-of, even when the latter appears to be of the most immediate sort. Indeed, all these hard and fixed lines, marking off psychological distinctions and the philosophical opinions based upon the distinctions, fade away in the light of the principle of continuity as it rules the soul's development. It is manifest that they do not give a life-like and correct portrait of what the soul is in reality. For the Self, as known or knowable by science, whatever it may be in-itself, is, like every other really existing being, an ever shifting, ever unfolding net-work of changing relations to other realities. In the psychological development of the individual, and in the scientific and philosophical evolution of the race, much the same thing is true. For the infant there is no sense-perception and no self-consciousness, no knowledge either of or about, no reality consciously envisaged or implied. But as an essential feature of the evolution of mind, both in the individual and in the race, what is matter of implication to-day is matter of envisagement to-morrow. Knowledge-about is constantly becoming knowledge-of. The botanist cannot see the flower as Peter Bell saw it. The adult cannot picture himself (his *Self*) as he was, when as yet he had no true self. What is conjecture on the part of trained and prophetic minds, whether applied to the realities of nature, of duty, of art, or of religion, in

one age, becomes the most common-place knowledge in another age. And what was affirmed as indisputable scientific knowledge-about, or even knowledge-of, objects, classes, laws, etc., in one generation, may be rejected as an idle dream in another generation. There is, for example, no more exacting and carefully trained use of the faculty of sense-perception, as the source of an immediate knowledge of the constitution of physical objects, than that of the microscopist when dealing with the higher powers of the microscope. At the same time, there is no other use of the senses for purposes of accurate knowledge, where ideals are more essential and more influential in the discovery of truth of fact, or the detection of errors of interpretation, as to what really is, and what actually happens. Witness both the past and the present controversy over what Dr. Bastian *really* sees to be *actually* happening in the media which he claims to have sterilised thoroughly.

If, then, the vain effort could succeed in stripping science and philosophy of the particular ideals which they have incorporated into their various systems, there would be left in the form of verifiable knowledge—just nothing at all. Not a conception, or law, or principle of either, is given or can ever be given, as a sure matter of factual experience. Every conception, law, and principle of both is shot through and through with ideals that are more or less distinctly or remotely implicated in such experience. Or, the rather, must we not say, there is no purely “factual experience”?

From the point of view of the psychology of knowledge, therefore, we come to the conclusion which was suggested and illustrated by the history of philosophy: Systematic philosophy, as the construction of the human mind by the rationalistic method, is an attempt to harmonise and frame together those ideals which shall seem best to explain and interpret man's total experience with what he considers real and actual, in existence and in fact. *Philosophy is, therefore, of its very nature some form of idealism.* And the epistemological principle which guarantees in any respect the conclusions of both science and philosophy is essentially the same. It is this: The Universe itself, the real world, is in fact constituted, and all its behaviour actually takes place as, the progressive realisation of the Ideal. What the particular ideals are, and how they may be made to stand together in harmony under the supreme Ideal, for the satisfaction of human reason and for the control of human conduct,—this it is which constitutes the perpetual problem of reflective thinking.

If the views expressed in this and the preceding article (already referred to) are in any considerable measure correct certain conclusions follow, which seem to be of practical importance as touching the more recent culture of philosophical speculation.

To make any violent and indiscriminating attack on Idealism would appear to argue a lack of intelligent appreciation of the lessons of history and of the psychology of cognition, including those conditions of all human knowledge which apply to science and philosophy alike. The momentous systems of idealism that arose at once from the soil which Kant supposed himself to have left for ever barren by his critical scythe, have indeed ceased to bear fruit wholly satisfying either for appetite or for nourishment. The assumption that man may reach an appreciation, not to say a comprehension, of the true Being of the World, either by some convulsive clutch of intuition, intellectual or emotional, or by a steady climbing on the ladder of dialectics, has now been sufficiently discredited. But our ways of learning are not different, and the essential nature of what we learn has not changed. Rationalism still furnishes the only method; Idealism the only expression for the content of what is learned. So far as any form of empiricism—pragmatism, or what not—furnishes chastisement and corrective for the reflective exercise of reason, it may have a negative use. But the moment it attempts any positive contribution to our knowledge of reality, or any new view of the meaning of truth, it becomes itself a form of rationalism. Its polemical and emotional code of procedure does not tend to commend it to rational minds.

The greater and more comprehensive and enduring systems of philosophy have always been consciously and avowedly systems of idealism. They will always continue to beseech. This destiny is guaranteed by the very nature of those processes of the human mind which make possible all higher knowledge of Reality, whether we call it Science or Philosophy.

Pragmatism and the new realism may serve for a day or two to prune away some of the inconsistencies and exaggerations of the current forms of idealism. But when the time of its pruning and chastening is past—and it soon will be past—a new and improved idealism will come to the fore.

Meantime, and all the time, it appears to us, it should be to the credit of philosophy, by whatever name it announces or parades itself, not to be too "cock-sure" in opinion or too jaunty or polemical in demeanour. That its cause has been discredited of late, both in scholastic and in popular

circles, there can be little doubt. While part of this discredit is unjust and is due to the temper of the age—with its imperfect conception of life and of the so-called “practical” in life, and its unbalanced estimate of values; no small part is also due to the manners, method, and content of the thinking of those who are professional or casual students of, or writers on, philosophy.

If one compares the discussions of scientific conventions and journals with those of philosophical associations and reviews, one can scarcely fail to be impressed with the marked superiority of the former. Both the tenets and the style of the schools of speculative or applied science are more sober, reserved, and courteous toward criticism, than are the tenets and style of existing schools of speculative or practical philosophy. But why should this be, when philosophy, beyond all other pursuits of the human mind, is bound to the consistent and patient use of all the powers of human reason, and to the establishment in the confidence of humanity, and in the control of human conduct, of the highest and surest and realest of Ideals?

II.—OBJECTIVES, TRUTH AND ERROR.¹

BY E. H. STRANGE.

It is a commonplace of philosophical discussion that the problem of error is singularly intractable. So Mr. Bradley says at the outset of his treatment of error in *Appearance and Reality*: "Error is without any question a dangerous subject, and the chief difficulty is as follows. We cannot, on the one hand, accept anything between non-existence and reality, while, on the other hand, error obstinately refuses to be either. It persistently attempts to maintain a third position, which appears nowhere to exist, and yet somehow is occupied. . . . And so error has no home, it has no place in existence; and yet, for all that, it exists. And for this reason it has occasioned much doubt and difficulty" (p. 186). On the other hand Mr. Russell makes it a reproach against most theories of the nature of truth that "they have tacitly assumed to begin with that all our beliefs are true, and have arrived at results incompatible with the existence of error. They have then had to add a postscript explaining that what we call error is really partial truth" (*Philosophical Essays*, p. 98). In Mr. Russell's view it is a merit of the pragmatists that they have tried to formulate a theory of the nature of truth with a due regard to fact that some beliefs are erroneous. In the essay "On the Nature of Truth" in his *Philosophical Essays*, and in the chapter "Truth and Falseness" in his *Problems of Philosophy*, his last pronouncements on the subject, Mr. Russell has himself made an attempt to elaborate such a theory of judgment as will enable us to state wherein judgments which are true differ, as such, from those which are false. In this paper I propose, first, to examine a theory of the nature of judgment, that of Meinong, which seems to be peculiarly liable to the reproach that it is incompatible with the fact of error. And, second, I propose to consider Mr. Russell's own account of

¹ A paper read before the Philosophical Society of the University College, Cardiff, in December, 1913.

the nature of judgment. This procedure has the advantage not only of illustrating the charge which Mr. Russell makes against the majority of epistemologists in the case of a thinker with whom Mr. Russell is in general sympathy, but also of throwing light on Mr. Russell's own doctrine. Apparently, a theory of knowledge in many important points the same as that with which Meinong's name is associated was arrived at independently by Mr. G. E. Moore¹ and accepted, with some diffidence and with an acute awareness of the difficulties involved in all theories of knowledge hitherto suggested, by Mr. Russell.² But, it seems, it was especially the difficulties of this theory of knowledge, with regard to the nature of judgment and the nature of error, which have stimulated Mr. Russell to work out the account of judgment, truth and falsehood which we get in his *Philosophical Essays* and in *The Problems of Philosophy*.

Meinong is what is called a realist. He attacks with great vigour two errors ruinous to a sound logic and theory of knowledge. The first of these errors is psychologism, the failure to grasp the fact that over against all knowing stands something known, and therefore either the neglect of the latter side of the whole fact of knowledge or the attempt to describe it in terms of the psychical side. The second error, what Meinong calls "the prejudice in favour of the actual" (*das Vorurteil zugunsten des Wirklichen*), supports the first. The fact that all knowledge is my knowing something is so obvious, that it would scarcely escape notice, if all knowledge were of what is existent. But mathematics *e.g.* is clearly knowledge of what is not existent. So we tend to say that what is known in mathematics, since it does not exist outside of us, must exist "in our minds," "as thought," and must therefore be expressed in psychical terms.³ Meinong insists, on the contrary, that everything psychical, with but very doubtful exceptions in the case of certain feelings and desires, is directed upon something, and without a reference to a something upon which it is directed a psychical fact is inexplicable. This being directed upon something (*das auf etwas Gerichtetsein*) can very well be regarded as a charac-

¹ MIND, N.S., No. 30, "The Nature of Judgment," where Mr. Moore maintains that "existence is itself a concept" and that "all that exists is thus composed of concepts necessarily related to one another in specific manners, and likewise to the concept of existence".

² MIND, N.S., Nos. 51, 52, 53, "Meinong's Theory of Complexes and Assumptions," especially pp. 204 and 523.

³ "Über Gegenstandstheorie" in the *Grazer Untersuchungen zur Gegenstandstheorie und Psychologie*, pp. 23-24.

teristic moment of what is psychical as opposed to what is not psychical.¹ This is true of judgments and assumptions as of other psychical facts. Meinong distinguishes between that concerning which we judge and that which is judged by the act of judgment. It is difficult in English to mark the distinction, but in German it is easy by means of the phrases "das Beurteilte" or "der Gegenstand über den geurteilt wird," on the one hand, and "das Geurteilte" or "das Erurteilte," on the other. In English the distinction is perhaps more clearly recognised in the case of legal judgment. The judge and jury judge the prisoner, but their judgment is "that the prisoner did not commit this offence". So we can say that what is judged is, in one sense, the prisoner, and, in another sense, that the prisoner is not guilty. These two objects involved in judgment are respectively the Object and the Objective of the judgment; but the latter is the peculiar object of the judgment, and is what we ought to mean when we talk about the object of the judgment without qualification.² The distinction becomes particularly clear in the case of true negative existential judgments. Suppose I say "No disturbance of the peace has taken place," and suppose that statement is true. Now every true judgment gives us knowledge of something. But what is the something known in this judgment? It might be answered that what we are given knowledge of is disturbance of the peace. But can we say that the judgment gives us knowledge of disturbance of the peace, when the intention of the judgment is to deny that such an occurrence has taken place at all? That of which the judgment gives us knowledge is that no disturbance of the peace has taken place, an Objective. Clearly, also, Objectives are involved in all assumptions. An assumption must always be of the form "that X is so and so" or "that X is". X is the Object, and that X is so and so, or that X is, is the Objective, the object which is characteristic of the assumption, as opposed to the Object X, which is the characteristic object of the psychical process by means of which X is represented. It is, of course, his investigation of assumptions and the part which they play in thought generally that is Meinong's great contribution to the theory of knowledge. It will be enough

¹ "Über Gegenstandstheorie," in the *Grazer Untersuchungen zur Gegenstandstheorie und Psychologie*, pp. 1-2. See also *Über Annahmen*, second edition, p. 233 and following, where he says that in the account of intending (*das Meinen*) in the first edition he had himself been guilty of the prejudice in favour of the actual.

² Throughout this paper I translate *Gegenstand* by the term *object* and *Objekt* by the term *Object* with a capital letter.

to instance the way in which assumptions are involved in questions. Questions, Meinong points out, are of two kinds. First there are questions of the form, "Is X so and so?" in which I simply ask you to confirm or reject my suggestion as to the nature of X, *e.g.*, "Is the weather going to remain settled?" These Meinong calls "Bestätigungsfragen," or better "Entscheidungsfragen". Such questions can be correctly answered only by means of the words "Yes" or "No," and the questioner expects only confirmation or rejection of his suggestion. Then there are questions in which the questioner, beginning with some knowledge of X, asks as to the character of X in some respect, when X may well be determined in this respect in a way which has not occurred to the questioner (Ergänzungsfragen or Bestimmungsfragen). *E.g.* when a man asks: "To whom does the fishing in this lake belong?" he may be answered by being told it belongs to some one of whom he has never heard. Questions of the first kind clearly involve assumptions, whereas those of the second kind presuppose judgments. If I ask you: "Is the weather going to remain settled?" it is evident that what I want is to extend my knowledge, just as in the case of questions of the second kind. But it is equally evident that the extension of knowledge to be gained by questioning can consist, at most, merely in being able to believe, on the strength of my confidence in your judgment, where formerly I only assumed. When I ask: "Is the weather going to remain settled?" I must be prepared to learn either that the weather is going to remain settled or that it is not. I must, then, assume both these alternatives, and you can only confirm or reject an assumption I have previously made. The words "Yes" and "No" supply nothing new in the way of an object. I do not invite you to make a judgment about any object you please, or to make any judgment you please about the weather, but to tell me whether the weather is going to remain settled. So the words "whether the weather is going to remain settled" indicate an Objective; and it is worth noting that in German these words can very well stand alone, without being introduced by such a phrase as "I asked you," just as in Latin the *oratio obliqua* does not always follow a verb on which it is dependent. What happens, when I allow myself to be guided by your judgment about the weather, is that before I assumed an Objective which I now believe. The only difference is in my attitude towards the Objective.¹

¹ *Über Annahmen*, pp. 120-125.

That is, very briefly, Meinong's doctrine of Objectives and judgment. And it follows from this doctrine that the distinction between true and false beliefs depends upon the distinction between valid and invalid Objectives. A belief is true when it is a belief in an Objective which is a fact, it is false when its Objective is not a fact. But the distinction between Objectives which are facts and those which are not facts does not seem to be further explicable. Some Objectives are indisputable, as that this room is brightly lighted, and that the angles of a triangle are equal to two right angles: others are clearly not facts, as that the sun is now shining, and that the angle in a semi-circle is one of a hundred degrees. And between these extremes we may get all degrees of probability. But there the matter seems to end. It is the case, Meinong says, that we do not naturally apply the terms "true" and "false" to Objectives. These terms are only applied to Objectives when we regard an Objective as the opinion or assertion of some person or other and criticise it as such. Common sense and philosophical tradition are agreed that what one asserts is true when it agrees with what is, or with what is fact. But this only means that we compare the Objective in question, as claiming to be valid, with the Objective as such, in order to determine whether the former is fact or not. "An Objective is most naturally said to be false so far as it is not true, and therefore, also, so far as it does not agree with an Objective which is a fact, or last so far as it is not a fact."¹ So, then, beyond Objectives it does not seem possible to go. But although certain Objectives are not fact, yet they and their Objects have being in some sense. This follows at once from Meinong's principle of "the being directed upon something" which is characteristic of the psychical. Moreover, we cannot make a distinction between true and false beliefs on this score, and say that true beliefs have Objectives, whereas erroneous beliefs have not, because in that case we could detect false beliefs at once by mere inspection, which is notoriously not possible. If there are Objectives for true beliefs, there must equally be Objectives for beliefs which are false. If a man believes that the philosopher's stone exists and that he has found it, his belief consists of judgments which have as Objects what he understands by the stone and his own researches, as Objectives the existence of the stone and that he has found it. A negative false judgment, also, has an Objective just as much as a false affirmative. So we may state the universal prin-

¹ *Über Annahmen*, pp. 94-95.

ciple that there can no more be a judgment without an Objective than a presentation (*Vorstellung*) without an Object.¹ In fact, as he points out later,² mere presentation (as in the case of the presentation of the letters of a book, or of the tones of a speaker's voice, when one is engrossed in the narrative; or again in the case of objects at the edge of the field of vision) is as completely passive a psychical fact as feeling, and apart from a judgment or an assumption can scarcely be said to have an Object at all. In the same way, contradictory objects are in some sense. Suppose I say "The round square is contradictory". That is a true statement, and there is an Objective which is a fact corresponding to that statement. But there must also be an Object corresponding to the words "the round square". This is that about which the judgment proceeds to judge, and therefore there must be such an Object, otherwise it cannot be judged. As Meinong puts it, "Any one who is fond of paradoxical modes of expression can therefore very well say: There are objects of which it is true to say that such objects are not".³ According to Meinong, the propositions "The golden mountain is of gold" and "The round square is round" are true, although tautologous. The matter is clearly put by two very acute pupils of Meinong, Dr. Rudolf Ameseder and Dr. Ernst Mally, in the volume of *Untersuchungen zur Gegenstandstheorie und Psychologie*. In his essay, *Zur Gegenstandstheorie des Messens*, pp. 128-129, the latter says: "The being round of the square is, as an *impossible* being-so, to be sharply distinguished from the being round and square of the "round square". For the latter is indeed a *contradictory*, but *not an impossible* being-so. It is only impossible that a square should be round, whereas it is not impossible, but on the contrary *necessary*, that a round square should be round and square". A little later, page 133, he says: "Through the Objective 'A is' the object when determined by the judgment [der Eigenschaftsgegenstand] 'A, which is' or 'being A' is given. Although A (the object to be determined by the judgment) [der Bestimmungsgegenstand] as a matter of fact is *not*, nevertheless it remains tautologically certain, that the being of the object determined by the judgment, '*being A*,' *subsists*.—By means of a judgment: 'the being A is' there is judged just as little concerning the (actual) being or not-being of A (the object to be determined in the judgment) as by means of the hypothetical judgment: 'If A is, then

¹ *Über Annahmen*, pp. 45-46.

² *Ibid.*, pp. 235 and following.

³ *Über Gegenstandstheorie*, p. 9.

it is'." Similarly Dr. Rudolf Ameseder says in his essay, *Beiträge zur Grundlegung der Gegenstandstheorie*, page 88, that an object which is both different and not different from red is impossible. Nevertheless, it remains that such an object is both different and not different from red. Therefore it must be true that red is both different and not different from it, without being on that account an impossible object.

It is evident that Meinong's doctrine of Objectives leads very easily to paradox and absurdity. Meinong seeks to avoid the paradox of his position in two ways. In the first place, he distinguishes between existence and existential determinations (Existentialsbestimmungen, which are Soseinsbestimmungen not Daseinsbestimmungen). If a thing exists, then that thing has existential determinations also, e.g., the determination of being the Object of a valid affirmation of existence. On the other hand, if a thing does not exist, it has not the determination of serving as the Object of a valid affirmative existential judgment. So it is not true to say that Kant's real hundred dollars have nothing that is lacking to the hundred dollars which are merely thought of. The judgment, "The existing golden mountain is existing," is as true as the judgment "The high mountain is high," but the judgment, "The existing golden mountain exists" is false. We must distinguish between saying "A exists" and "A is existing," between "being existing" and "existence". When I say a thing is existing, I am merely attributing to that thing an existential determination, i.e., a predicate, and a predicate is never existence itself, as certainly as that to exist is not to be so and so, or being so and so is a thing which is so and so, i.e., as certainly as that the Objective is not an Object (so gewiss das Dasein kein Sosein und auch das Sosein kein "So," d.h. das Objektiv kein Objekt ist).¹ This distinction, however, between existence and existential determinations, Meinong admits, does not go far towards solving the problem which was propounded centuries ago by the ontological argument.

Second, Meinong falls back upon a principle enunciated by his pupil Mally, the principle, namely, that character is independent of being, so that the fact that an object is not does not touch in the least its character. "What is in no wise external to the object, but rather constitutes its own nature, consists of its character, which remains to the object,

¹ *Über die Stellung der Gegenstandstheorie im System der Wissenschaften*, pp. 17-18; *Über Annahmen*, p. 141.

whether it is or not."¹ "This principle is valid not only of objects which as a matter of fact do not exist, but also of such as, being impossible, cannot exist."² Suppose I judge that a *perpetuum mobile* does not exist. It is clear that the object of which existence is denied must have properties and peculiar properties, otherwise my conviction of its non-existence could have neither sense nor justification. These properties, then, in no wise presuppose existence, for existence is just what is rightly denied. An object is apprehended by means of its character; but our apprehension must find something given it as an object, without in any way prejudging the question whether the object is or is not. The object is apprehended by means of an affirmative assumption, "for it lies in the nature of an assumption to be directed towards a being which does not need to be"³ And in so far we may say that there is this object, since even to negate A I must first assume the being of A. This extraordinary meaning of the phrase "there is" (*es giebt*) is what Meinong calls "the being outside being of the object as such" (*das Aussersein des reinen Gegenstandes*). It is in this sense that the paradox is true that there are objects which are not. An object as such, he says, is the other side being and not-being (*jenseits von Sein und Nichtsein*).⁴ So, then, besides existence and subsistence there may well be a third kind of being. But this third kind of being cannot have a not-being of the same kind opposite to it, because in that case we might inquire whether a given object was or was not in the sense of this third order of being. But in order to avoid prejudging this question, we should have to postulate a fourth kind of being, and so on for ever. This third kind of being, Meinong remarks,⁵ is not a determination of being (*Seinsbestimmung*), but rather the lack of such a determination. It is on account of this doctrine of the "*Aussersein des reinen Gegenstandes*" that Meinong makes no exception to his principle that no judgment or assumption can lack an Object and an Objective. But such an exception is made by his pupil Dr. Ameseder. It is a fact, Dr. Ameseder says, that the round square is round, although the round square has no being as a matter of fact. On the other hand the Object of an affirmative existential Objective and of the corresponding negative Objective is not a fact. So it follows that by means of the phrase: "an object which is the Object both of a valid

¹ *Über Gegenstandstheorie*, p. 13. ² *Ibid.*, p. 8.

³ This point is stated at length in *Über Annahmen*, § 38.

⁴ *Über Gegenstandstheorie*, p. 12. ⁵ *Über Annahmen*, p. 80.

positive and of a valid negative existential Objective," no object whatever is indicated, not even an impossible object, for impossible objects are necessarily the Objects of valid negative existential judgments.¹ Here at last we have touched bottom. It is admitted that a phrase may be significant and yet denote nothing whatever. This means that Meinong's principle of "das auf etwas Gerichtetsein" which is characteristic of the psychical, as Meinong understands this principle, breaks down. If the principle is true, there are objects which are so preposterous that even among impossible objects there is no place for them. In these circumstances one can only say with Lear: "O! that way madness lies; let me shun that; no more of that". We may well ask whether we should not do well to reconsider this principle. It is clear that judgment and assumption cannot be expressed in term of the mind, on the one hand, an object, on the other, and a relation in all cases the same between the mind and its object, although these terms may be sufficient to describe other psychical facts.

I propose to consider the account Mr. Russell has given of judgment, truth and error in his *Philosophical Essays* and in *The Problems of Philosophy*. The question is also dealt with in an article "On Denoting" and in his review of the *Untersuchungen zur Gegenstandstheorie und Psychologie* in MIND for 1905, in the paper "Knowledge by Acquaintance and Knowledge by Description" read before the Aristotelian Society in March, 1911, and in *Principia Mathematica*, volume i., Introduction, chapter iii. In *The Problems of Philosophy* Mr. Russell begins by laying down three conditions which a satisfactory theory of truth must fulfil. (1) Our theory of truth must be such as to admit of its opposite, falsehood or erroneous belief. "A good many philosophers," he says, "have failed adequately to satisfy this condition: they have constructed theories according to which all our thinking ought to have been true, and have then had the greatest difficulty in finding a place for falsehood." It seems difficult to see how Meinong can avoid this charge. If there always is an Object and an Objective whenever I make a judgment, why should I not claim that my judgment is true as indicating what is necessarily there?² Meinong's doctrine of the "Aussersein des

¹ *Beiträge zur Grundlegung der Gegenstandstheorie*, p. 86.

² This point is almost suggested in *Über Annahmen*, p. 242. If the problem of impossible objects is answered by saying that besides existence and subsistence there is a third order of being, which belongs to an object as such, then an object would be apprehended (*erfasst*) not by means of an assumption but by means of a judgment.

reinen Gegenstandes," it may be urged, simply postpones the difficulty. Even if we allow that impossible objects in some sense are, yet we are led to objects which are too preposterous even to be impossible. Moreover, I can assert that an object A is, not in the sense in which an object of thought must as such be, but in the ordinary sense of existence. So, then, I can use intelligibly the phrase "A which exists in the ordinary sense, but which is not in the sense in which an object of thought, as such, must be". But it does not follow that the object A does exist. Nor can we say that it has being in the sense of the "Aussersein des reinen Gegenstandes," for that is just what is denied. To accommodate it we should have to postulate a fourth order of being, consisting of objects impossible to the second power, so to speak, and so on for ever. Why, then, should we say that objects like the round square and the golden mountain are in any sense whatever, since such objects have obviously been arrived at in the same way as objects which are still more preposterous? In that our theory of belief must take account of erroneous beliefs, Mr. Russell continues, it must differ from our theory of knowledge by acquaintance, since the latter admits of no opposite. It is possible to misinterpret what is given immediately, but acquaintance itself cannot be deceptive. Either I am acquainted with some fact or I am not. There is no erroneous acquaintance with things.

(2) It is clear that error is an affair of our beliefs and not of the facts. Apart from minds there are facts, but facts are neither true nor false. It is impossible to hold that when I am in error I am unfortunate enough to be directing my attention upon an object which is, in some sense, but is not existent nor subsistent. It is monstrous to suppose that we cannot discuss this present topic of impossible objects without being committed to the position that such objects are. But (3) although error is an affair of my belief, as opposed to the facts of the case, it is clear that a belief is true or false in virtue of something outside itself. Beliefs are true if justified by the facts of the case, and not on account of some intrinsic property they possess. In other words we must accept some form of the correspondence notion of truth. The great difficulty is to define the exact kind of correspondence which constitutes truth, and to discover exactly what it is which corresponds with the facts, when I believe truly.

The first of these conditions and the paradox of Meinong's position show clearly that we cannot regard belief as a rela-

tion of the mind to a single complex object. To do so leads at once, in the case of false beliefs, to false Objectives or objective falsities, and to objects which are and yet are not. If Othello believes falsely that Desdemona loves Cassio, we cannot say that his belief is related to a single complex object, Desdemona's love of Cassio; because if that were the case his belief would not be false, for to call his belief false means that there is no such object. And to say that Othello's belief consists in his relation to the Objective "that Desdemona loves Cassio" seems to involve difficulties almost as great. But we cannot reject single complex objects in the case of false beliefs and keep them for true beliefs, because that would be to make an intrinsic distinction between beliefs which are true and those which are false, and enable us to discover which are true and which false by mere inspection. So we must say that no judgment consists in a relation of the mind to one single object. The relation of believing is a multiple relation, *i.e.* one which involves more than two terms. When Othello believes that Desdemona loves Cassio, there are four terms, or constituents, involved, namely Othello, on the one hand, the subject, and on the other Desdemona, loving and Cassio, the objects of the judgment. This does not mean that Othello has one relation to Desdemona, and the same relation to loving, and again to Cassio. It is true that Othello must have a relation to each of these: he must be aware of these objects in order to make the judgment at all. But this is not the essence of his judgment. The relation of believing is not one which Othello has to each of the three objects concerned, for then we should have three instances of a dual relation, not one instance of a multiple relation. The relation of believing is one which Othello has to the three objects, Desdemona, loving, and Cassio, all together. Othello's belief knits together into one complex all four terms. In this respect judging is like every other relation. Believing is the uniting relation. Now the relation of judging has a "sense" or "direction". In virtue of this sense, it arranges in a certain order, to speak metaphorically, the objects of the judgment, as indicated by the order of words in a sentence or the inflections of an inflected language. One of the objects of our judgment, namely loving, is itself a relation, but this relation, as it occurs in the act of believing, is only an object like the other two: it is a brick in the structure and not the cement. When the belief is true, there is another complex unity, made up of the objects of the belief in the same order as in the belief, in which unity the relation of loving, which

was one of the objects of Othello's belief, relates the other two objects, namely Desdemona and Cassio. But if the judgment is false, there is no such complex factual unity composed only of the objects of the belief.

It is interesting to note the difference between this account of judgment and that given in *Philosophical Essays*. In the latter there is no mention of the sense of the relation of judging. The only sense or direction mentioned is that of the object-relation. Suppose I judge that A loves B. Mr. Russell insists that the mere fact that I make this judgment does not involve any relation between the objects A and love and B, otherwise we have excluded the possibility of false judgments. "But," he says, "the judgment [that A loves B] is not the same as the judgment 'B loves A'; thus the relation must not be abstractly before the mind, but must be before it as proceeding from A to B rather than from B to A" (p. 183). The same point had been made in *The Principles of Mathematics*. If you analyse the object-constituents of the judgment "A loves B" into A and the abstract relation of loving and B, you have destroyed the unity of the judgment: you have reduced the judgment to the apprehension of a mere string of objects in succession. If I say "Desdemona," then again "Loving," and again "Cassio," and you understand my words, you apprehend in turn the objects Desdemona, the abstract relation loving, and Cassio. But you do not judge that Desdemona loves Cassio or even assume it, unless you do so in spite of the way in which the words are uttered. "A proposition, in fact," Mr. Russell says, "is essentially a unity, and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition" (p. 50). So, then, we must say that when I judge that A loves B, I must apprehend the relation of loving as having a sense, *i.e.* as proceeding from A to B. But are we not now back again in Meinong's position: have we not now a single complex object for all judgments, true or false? Does not the fact of false judgments compel us to say that the object-relation is an abstract relation? It is, it seems, on this account that Mr. Russell is careful in *The Problems of Philosophy* to say nothing about the sense of the object-relation, but to make the judging relation the uniting relation, and to say that the object-relation is "a brick in the structure, not the cement".

What one feels on reading this account of judgment is that it is clearly an account of something else. To use a

simile of Mr. Russell's, it is as if one were told that a horse is a pachydermous animal with tusks and a trunk. The description seems so obviously not to meet the case. And this is suggested by the admission that to talk about the relation of judging "arranging" the objects of the judgment in a certain order is to make use of a metaphor. Suppose I judge truly that my ink-pot is to the right of me. According to Mr. Russell it is the relation of judging, which, in virtue of its sense, arranges the objects of my judgment, namely the ink-pot, the relation of rightness and my body, in the order characterised by the order of words in the sentence "The ink-pot is to the right of me". But, one feels, the ink-pot is where it is and I am where I am and the relations between us are just what they are independent of the act of judgment. The judgment is true just because it announces such independent fact. There is nowhere, call it "in the belief" or what you please, where the ink-pot and myself are arranged in an order different from the actual order in which we are, any more than there are objects which are and yet are not, otherwise we have thrown over Meinong for nothing. The order between the objects of my judgment is entirely their own affair, and owes nothing to the sense of the relation of judging. Of course, I have taken a judgment which happens to be true, but why should I not? A sound theory of judgment must take due notice of the fact that some judgments are false, but it must not accommodate itself to false judgments in such a way as not to do justice to judgments which are true; and it is just the point of true judgments that they do nothing to the facts, but assert what is independent of themselves.

This argument is, I believe, sound. But it is, I have been convinced, no refutation of Mr. Russell's theory of judgment. It is simply a denial of his main point that judging is a multiple relation. It means that the relation of believing is everywhere a dual relation, proceeding from the subject to a single complex object, and we must find some other way of providing for the possibility of error. At the same time there are certain difficulties involved in Mr. Russell's position. He appeals to a difference of sense of the uniting relation of judging to account for the difference of order involved in the two judgments "A loves B" and "B loves A". But compare the two judgments "A loves B" and "B is to the right of A". To account for the difference between these two judgments a difference of sense of the same relation is not enough. There is a difference of kind in the relations involved in these two judgments; for the factual

complex with which the objects of the first judgment must agree, if the judgment is to be true, has a different kind of order from that in the facts which determine the truth of the second judgment. For every way in which the facts are ordered there must be a corresponding way in which the objects of the judgment are arranged. In the judgment "A is more beautiful than B, but not so good," we have two new kinds of order involved. We cannot explain these differences of order by appealing to the objects of the judgments, because even the object-relations are mere bricks in the structure and not the cement. The judging relation, as being the uniting relation, is the sole source of order in the belief. The relation of judging, then, is not only a multiple relation which may have any number of terms and senses, it may be any one of an indefinite number of multiple relations. This seems scarcely credible. Believing seems everywhere the same relation. Or if it were true that the term "believing" were one which covers an indefinite number of multiple relations, it seems difficult to see how one could be ignorant of that fact or deny it.

But this leads on to another difficulty. A belief is true, according to Mr. Russell, if there is a complex factual unity composed *exclusively* of the objects of the belief, in the same order as in the belief, with the object-relation now occurring as a uniting relation binding together the other objects. On the other hand a belief is false when there is no such complex unity composed *only* of the objects of the belief. That is to say, we have to compare with a factual complex the constituents of the belief, in the same order as in the belief, but minus one of their number, namely the subject-term, and therefore apart from the uniting relation, which alone binds together the constituents of the judgment. But if you have dropped out the subject in this way, what right have you to suppose that there is any order in the objects? If believing is a multiple relation, it is a multiple relation of a very special kind. Compare it with the multiple relation "between". Three terms are necessary for the relation "between". But if you drop one of the three terms necessary for the relation "between," you still have a relation between the other two. This is not the case with the relation of judging. In order to account for the possibility of erroneous beliefs we have to disregard the relations which do, as a matter of fact, subsist between the objects of the judgment. The uniting relation is that of believing, which knits together all the constituents of the judgment. But when now you have left out the subject of the judgment, you have destroyed the sole source of

unity in the judgment. It is useless to talk about the order of the objects "in the belief". That is simply out of deference to your previous assertion that believing was the uniting relation. You might as well talk about the order of A and B "in the relation of 'between'". The phrase has no meaning apart from the subject and the uniting relation of believing, any more than it is significant to talk of the relation of "between" when you have not three terms. On the other hand, if there is an order among the objects of the belief apart from the subject and the relation of believing, then judgment is, after all, a dual relation of the mind to a single ordered complex object, and we are in the old difficulty about erroneous judgments. We have here come upon what seems to be the characteristic weakness of any attempt to represent judgment as the arranging of its objects, namely that it tends to make judgment two things instead of one, and leads very easily to a vicious infinite. To account for the fact of error it is said that judging means the mind's arranging its objects. But, it is felt, belief is something different from the arrangement of objects. When I poke the fire I arrange certain objects in a certain order, but this is not judgment. So, then, one tends to say that not only are the objects arranged in an order, but the order is also asserted. If, to avoid this vicious infinite, you say that belief means simply the objects' coming into a relation with the subject, then you have to draw upon a different relation, namely that between the objects alone, in order to state wherein the truth of a judgment consists. In Mr. Russell's theory, for the purpose of providing for the possibility of error, judgment is a multiple relation which knits together subject and objects and which is the sole source of unity in the belief. But for the purpose of defining truth, the uniting relation of judging is so successful in binding together subject and objects into one complex, that it confers on the objects an order which they have apart from itself; so that judgment can be analysed into such an ordered complex of objects, on the one hand, related to the subject, on the other. It will not do, of course, to say that one can gather the required order among the objects by appealing to the order of words in the sentence in which the judgment is expressed, or the inflections of an inflected language. What one gathers from the sentence is the asserted order, and it is in our attempt to determine the nature of assertion that we have been led to seek for an order among the objects of the assertion. Unless I have failed entirely to grasp Mr. Russell's meaning and have misrepresented him in consequence, this

is a point which it is incumbent upon Mr. Russell to clear up. Believing seems to be so extraordinary a multiple relation that our knowledge of other multiple relations does not help in enabling us to understand it, and it seems scarcely worth while to call it a multiple relation at all.

The solution of the difficulties presented by the fact of erroneous beliefs and impossible objects seems to consist in regarding belief not as a relation of the mind to more than one object, but as involving over and above the facts of the case, which determine whether the judgment is true or not, and the act of judging, something which is not fact at all, nor a relation between facts, otherwise we seem to lack terms sufficient to describe the fact of judgment. We must, in short, fall back upon a doctrine of Objectives, but we must not let Objectives swallow up the facts, nor regard the relation of the mind to Objectives as the same as its relation to objects of presentation. The key to the whole problem is to be found in Mr. Russell's distinction between knowledge by acquaintance and description. Meinong's doctrine, one feels, suffers from the lack of an explicit statement of this distinction.¹

That Objectives are necessary can be shown directly by considering what it is that is verified when a judgment is brought to the test of the facts. Suppose I say, "It is now raining," and you proceed to verify my assertion. Clearly what you verify is not my act of judging that it is now raining. You are not interested in ascertaining my state of mind, whether I do really believe that it is now raining or whether I am lying to disappoint your hopes of a fine evening. What is verified is something which is not psychical at all. Nor is what is verified the material facts of the case. It is by becoming immediately acquainted with the weather that you verify what it is that is verified. The facts of the case, the weather conditions, cannot be verified. A fact is a fact and can only be immediately presented and perceived. One is *acquainted* with facts. The term "fact" is, of course, ambiguous. A "fact" may mean a particular presented in immediate experience, something with which one is immediately acquainted. But we also say: "It is a fact that

¹ This distinction is, however, implied, e.g., in his *Über die Erfahrungsgrundlagen unseres Wissens*, p. 82, where he is meeting the idealist argument that everything is necessarily related to mind because I cannot think of anything unthought of, for whatever I think of is, *ipso facto*, something thought of. Meinong remarks that you might just as well tell a cautious steward, who was keeping a certain sum in reserve for unforeseen expenses, that that very fact proved that the expenses were not unforeseen.

it is raining". A "fact" in this sense means a valid Objective, what does correspond with the "facts" in the first sense. What is verified when my assertion is brought to the test of the "facts" is the Objective "that it is raining". If this Objective is found to agree with the "facts," it is said to be a "fact". An Objective, then, is neither the psychical fact, the act of assertion, nor the facts of the case, with which, when it is true, it corresponds. It is what is asserted in the act of asserting, not the act of asserting itself.

In immediate experience I am acquainted with complexes of facts. I perceive at once, *e.g.*, a patch of white on a larger patch of brown. Also I am immediately aware of the patch of white as existing, as being there. But the moment I proceed to describe, for the benefit of another, what it is I am immediately aware of, I make use of judgments, and judgments involve Objectives. This is so even when I merely point with my finger: it means "There is that". And all understanding of the words I use means judging or, in case you do not believe at once, assuming. This is so whether the words uttered are whole sentences or not. If you say to me "London," I promptly make again some of the judgments in which my knowledge of the city which is called "London" consists. If you say to me, "The negro calumniator of the wizard of Hackney Moss," then, since I have never heard of these persons or of this place before, I assume that there was a man who was black and who calumniated a man who practised magic and lived at a place called "Hackney Moss". If you say to me "Between," then for a time I may be at a loss, but when I have collected my wits I may go on to judge, *e.g.*, that there is the relation of between, or that between is a multiple relation. In another context I might think that your utterance referred to some present object, and judge that A is between B and C. But until I have either judged or assumed I have not understood you, and am simply in a state of shock. The unit of thought is the Objective, and without Objectives there is no thought. Now since all words, when used intelligibly, express judgments or assumptions, it is evident that most judgments involve more than one assertion, although usually every assertion involved but one is taken for granted as common ground to both speaker and auditor. I can judge that an object given immediately in experience is X. Then I can go on to judge that this X, or this X thing, is Y also. Further, I can judge that this X, which is Y also, stands in the relation R to Z. In this way previous judgments are summed up and form the presupposition of further judg-

ments. But obviously one can challenge not only the assertion now being made for the first time, but also the assertions taken for granted. If I say "That horse is lame," it is quite relevant to retort, "It isn't a horse but a mare". The assertion "You will find the *Republic* on the top shelf with the other small books, next to my copy of *The Problems of Philosophy*," can be denied in many ways. One can say, e.g., "It isn't your copy, but the one I lent you," or "There are no small books on the top shelf," and so on. In this way we can solve the difficulty of objects like the round square and the golden mountain. Thinking is not to be described as the contemplation of objects. It is possible to contemplate factual complexes given in immediate experience, abstract universals and visual and other images. But to contemplate any of these is not to judge, nor to assume. It is not the case, as Meinong asserts,¹ that we ourselves in this present discussion have been occupied with objects like the round square and the golden mountain. If that were the case, there would be no escape from the conclusion that there is a round square and a golden mountain. We have been occupied with the theory that there is something which is square and round, and something which is a mountain of gold. And being "occupied" with this theory means judging that some one who is called Meinong and who is possessed of extraordinary philosophical acuteness has put forward this theory. When I say that the round square is an impossible object, I do not first turn my attention upon the round square and then proceed to make a judgment about it. I do not do this because there is no round square upon which to turn my attention. I first assume a thing which is both round and square, and then go on to judge that such a thing is impossible. If the proposition: "The golden mountain is of gold" means that there is a golden mountain, and this mountain is of gold, it is false: if it means that a mountain which was of gold would be of gold, it is true. The whole of the present discussion has consisted of judgments and assumptions. Judgments and assumptions involve Objectives, and Objectives can only be analysed into Objectives. This does not mean that when I make a judgment or an assumption visual and other images do not occur to my mind. When I make a judgment about Table Mountain, e.g., the image of a mountain with a flat top flits before my mind. This is what makes my judgment possible, because, as Mr. Russell has shown in his paper "Knowledge by Acquaintance and Knowledge by Descrip-

¹ *Über die Stellung der Gegenstandstheorie*, p. 18.

tion," "All names of places—London, England, Europe, the earth, the Solar System—similarly involve, when used, descriptions which start from some one or more particulars with which we are acquainted" (p. 116). In many cases the particular is merely the name of the place. But such visual images are external to my judgment about Table Mountain, just as my judgment that the paper on which I am writing is white is concerned with, but external to, the facts of which I am immediately aware.

The fact that all judgment involves Objectives which are of the facts does not mean, of course, that Objectives come in between me and the facts to make all judgment subjective. It is no more a reproach that Objectives are not the facts of the case than it is a reproach to the portrait painter that he deals in paint and canvas. That does not prevent his painting good likenesses. The objection clearly undermines itself, for if it were relevant then the objector, *qua* judging subject, is himself not doing justice to the facts of the case with regard to this present topic of the nature of judgment and Objectives. And if the question is raised: How can you distinguish between the Objective of your judgment and the thing about which the Objective is, in cases when you have never been immediately acquainted with the thing? the answer is simple. Suppose I judge that Table Mountain, on which I have never set eyes, is flat. Immediate acquaintance with the object which is called "Table Mountain" is only possible for those who happen to be within a few miles of that object. My distinguishing between the Objectives, in which I express my knowledge of Table Mountain, and the object called "Table Mountain" itself, means to judge that there is such a distinction, and not to contemplate Table Mountain itself at all. The Objective in which I assert this distinction, like all Objectives, is composed of nothing but Objectives. I can judge that there is a difference between the facts given to me now immediately in experience and the Objectives in which my knowledge of these facts is expressed. And on the testimony of others I have formed a series of judgments which I believe to be valid, *i.e.* to be justified by certain facts, in the same way as my judgments of perception are justified by the facts with which I am immediately acquainted. If it were the case that in all judgment an Object is presented, on which my attention is directed, it seems difficult to understand how there could be such differences of opinion as is actually the case on all subjects, not excluding this present topic of the nature of judgment, concerning which we could

raise a question at all. The worst that could happen would be that we might give the same name to different Objects; but even then such misunderstandings would be speedily detected, and we could scarcely avoid gaining the same general knowledge of our Objects. It is because all discussion consists of judgment and assumption, that there is room for difference of opinion greater than our differences of opinion as to the sensible qualities of objects.

It remains now to characterise the relation in which truth consists. A belief is true when its Objective is valid or is "a fact". When I say "My ink-pot is in the middle of the table," it is clear that neither the ink-pot nor the table is in the Objective that the ink-pot is in the middle of the table. The ink-pot and the table are in this room, this room is in this house, this house is in this street, and so on. The Objective is *of* these objects, it does not include them. This is a point Meinong makes, *Über Gegenstandstheorie*, page 12, where he rejects the argument that since everything, however impossible, can be the Object of a valid, *i.e.* a being Objective (we can say *e.g.* that the golden mountain is not), therefore any such Object can be said to be. This argument, says Meinong, supposes that the Objective is a complex of which the Object is a part. But this is merely an analogy which we must not press too far, since it breaks down in this present case of negative existential judgments.¹ An Objective is necessarily timeless, unchangeable and non-existent. Further, an Objective does not subsist. Difference subsists between A and B when A and B are different, but that A and B are different, or that difference subsists between A and B, does not subsist. But if there is a difference between A and B, then we can say that the relation of truth subsists between the Objective that A is different from B and the factual complex A being different from B. An Objective is to be called valid or invalid, *true* or *false*, "*a fact*" or not "*a fact*," but not *subsistent* or *non-subsistent*. The relation between Objectives and factual complexes which we call truth is ultimate and indefinable. It is possible to show in detail that an Objective is valid, in that an Objective can be resolved into a number of Objectives which correspond with the facts, just

¹ Compare, however, *Über Annahmen*, p. 47, where he says that Object and Objective do not make a duality, in the sense of standing independent and separate one from the other. The Objective is not something separate in addition to the Object, but the Object, in so far as it is apprehended by the judgment, stands in an Objective, of which it forms a kind of integrating constituent.

as a portrait can be shown in detail to be a good likeness. Further it is possible to talk Logic about Objectives, *e.g.* to make various distinctions with regard to their quantity and quality and so on, just as one can treat a portrait as a work of art and not merely as a good or bad likeness. But the way in which a valid Objective corresponds to the facts of which it is valid cannot be further resolved. Any attempt to resolve this relation seems to result in the disappearance either of the facts or of assertions. An Objective can make no difference to the facts, because it neither exists nor subsists. The act of judgment or assumption may make a difference to the facts. We have all heard of scientific instruments for recording changes in nature so delicate that one dare not approach, but must read these instruments with a pair of glasses from a distance, because one's presence makes a difference to the facts recorded. In this way the act of judging or assuming may well set up bodily changes which may, in turn, change the facts. But such changes could be calculated and allowed for, and are irrelevant to the question of the nature of truth.

In this account of judgment there are difficulties and problems enough. The adequate discussion of them would require a whole treatise. In particular, I conceive it to be a very interesting question, how we pass from one Objective to a second which contains but goes beyond the first. On the analysis of judgment into Object and Objective there is no special problem. Inference can be regarded as analogous to the process of plotting out figures on a background. But for a theory which rejects this analysis the question is difficult. To certain points involved I hope to return later

III.—INTERCOURSE AS THE BASIS OF THOUGHT.

BY WILLIAM WARRAND CARLILE.

IN philosophical investigation the inquirer frequently finds that he gets a suggestive lead given to him if, in reflecting on some universally accepted fact or concept of practical life, he puts to himself the question, What are the postulates that lie behind it?

Let us ask ourselves accordingly, What are the postulates that lie behind the simple fact of measurement? Take an example; say that we have before us two similarly constructed steel bars that, perhaps, look to be about the same length, how will we decide whether they are so precisely or not? By putting them alongside one another and feeling their ends with the finger. Sense will tell us whether there is any protrusion of either bar at either end. The sensation of unevenness tells us that there is protrusion, of perfect evenness and smoothness that there is none. If there is none we call them precisely equal to each other. If one of them is a foot rule, then we say that the other is just a foot in length.

Sense thus undoubtedly furnishes us with the information which is the basis of the judgment of equality. But we know that with regard to sensations generally the one thing of which we can be certain is that they are never quite the same for one man as for another. How is it then that, in this case, sense can give us information that it is felt and universally acknowledged is identical for all men? That surely is a problem that invites further inquiry.

We may remark, in the first place, that it is clear at once that sense can only give us any information at all upon the subject when the sensation that we experience is experienced in answer to a question that we ourselves have put to Nature. The mere unasked, unsought sensation tells us nothing. Experiment, as Kant very justly says, is only fruitful when reason does not follow Nature in a passive spirit, but compels Nature to answer its own questions.

As regards our example, we must have put to Nature the question, Are or are not these two bars equal? before sense can tell us anything. But in order that it may be possible

for us to put such a question to Nature, it is evident that we must have the ideas of equality and inequality in our minds already, and a knowledge of the test to be applied to determine equality in special instances. Where do we get all this knowledge?

The Kantian would say that these ideas are of a *a priori* origin, that is to say that they are, in some sense, implanted in our minds at birth. We must not, however, invoke a miracle when a natural explanation of things is possible. The natural explanation appears to be this: that these conceptions are learned from other human beings during the first years of life. We learn them, perhaps, almost or altogether unconsciously by object lessons, in learning the meanings of such words as quantity, measurement, equality, inequality and so on, and we have these conceptions ready so that we can subsume under them any salient facts that may emerge in the course of our experience. There is in this subsumption a process that seems to be closely analogous to developed scientific reasoning.

If, however, the ideas that enable us to put our questions to Nature are derived from intercourse with our fellows it is plain that, as a condition precedent to any precise knowledge of the external world, intercourse with our fellows is necessary. It is indeed, I think, necessary as an antecedent condition to any knowledge of the external world whatever. It is, at any rate, evident that the questions that we put to Nature must be in some way concerted questions, as the salient feature of the answers that we get is that they are truths valid for all. It is plain that we could not have the assurance that any truth was valid for us all until some method had been discovered which made the definite and precise comparison of knowledge between man and man possible.

The indispensable basis of this comparison is the certainty, somehow arrived at, that the material objects that any two of us are speaking of are the same things for one man as they are for another.

How this, the intersubjective identification of things, is possible, is a question that I endeavoured to deal with in a recent number of *MIND*.¹ Briefly, I think, the answer is this: I can be sure that this spot (.), say, on the paper is the same thing for you as it is for me because I cannot put my finger on it while yours is there without displacing yours, nor can you put yours there while mine is there without displacing mine. This is ultimately the fact to which the notion of impenetrability corresponds. Sense again gives us this infor-

¹ October, 1912.

mation ; but again it can only give it when, in some sense, a definite and concerted question on the subject has been put to it by experimenting thought.

Truth is thus always the coincidence of two things, and this consideration puts in an unexpected light Berkeley's doctrine that *Esse* and *Percipi* are always and necessarily one and the same ; or, as Mr. Bradley expresses it, that " Being and Reality are one thing with sentience ".¹ Sensations, indeed, only necessarily coincide with truth, knowledge, or reality when they are sensations, that verify an anticipation. Sensations *per se* may perhaps be said, in a sense, always to have a reality of their own, but it can only be reality in some secondary sense. Plainly it cannot be the reality of which we intend to speak when we contrast reality with illusion. If it were so there could then be no illusions of sense. Sensations would be all equally realities. The fact of the preliminary anticipations thus, we find, enters into the constitution of every truth and every fact just as indispensably as does the sensation that verifies it.

The type instance of a truth is undoubtedly a statement made to us by some one of those about us as to some event about to happen, and which we find verified by the actual happening of that event. Truth is thus, beyond question, primarily a concept of intercourse. Subsequently we extend the conception to verified anticipations that have been raised not by information received from without but by inferences of our own from experience. The conception in its primary aspect is plainly one open to many intelligences to which in its secondary aspect it is altogether closed. This view of the question goes again to emphasise the fact that, to the formation of truth the preliminary assertion or inference is not less essential than is its subsequent fulfilment.

We are familiar with Kant's distinction between the presentation to sense that is merely felt and the presentation that is also thought. To be thought, in his view, is to be brought under one of his pure intuitions or under one of his *a priori* categories. Even if we cannot accept that view we may still recognise that the distinction corresponds to an important truth. We may co-ordinate it with Green's gleam of insight, that the feeling as soon as it is named is transformed into the thing felt. What Green is speaking of is the sensation caused by heat. Such sensations cannot obtain their names precisely in the same way that material objects can. In the case of the latter the conferment of the name can immediately follow on the intersubjective identifica-

¹ *Appearance and Reality*, p. 146.

tion of the object by touch or by indication, on the "showing" of it, as Locke expresses it. In the case of the former the naming registers the experience of perhaps innumerable sensations of a similar type, and is something that would not have been possible without that experience. Plainly in this case the thing named must be the thing thought. It must correspond to the sense datum not merely felt but brought under a general conception. The presence in the mind of the antecedent general conception we may look on as the anticipation; the emergence of the sensation and its falling under it as the verification.

The anticipation and the verification present themselves under a great variety of aspects. In logic we have them in the major and the minor premisses. Sir John Herschel says very justly of Mill's theory of the syllogism that "it is one of the greatest steps which have yet been made in the philosophy of logic". We are sometimes liable, indeed, to underrate its greatness. It was beyond question Mill's most important contribution to philosophy. All reasoning, he holds, is really reasoning from particulars to other particulars and thus the syllogism as commonly set forth in the handbooks of logic palpably involves a *petitio principii*. When we say

All men are mortal
Socrates is a man
therefore
Socrates is mortal

"the proposition Socrates is mortal is presupposed in the more general assumption, All men are mortal". This is unquestionably true. Yet for all that it is not to be denied that the syllogism expresses in a fashion the real movement of thought. Where the appearance of triviality and fallacy comes in is in the fact that the logician probably conceives of himself as seated in his arm-chair, in his study, engaged in the consideration of abstract propositions. Viewed from that standpoint the syllogism is indeed trivial and futile. The case is altered if we conceive of him as immersed in the activities of life, as engaged, say, in some forensic discussion, or in watching, in the laboratory, the processes of physical change. *The minor is always to be looked on as a fact that at the moment emerges*, the admission, it may be, of a hostile witness, or the colouring of the litmus paper disclosing the presence of some reagent. The logician, of course, could make no use of either fact if he had not, in his major, a general principle ready in his mind under which to class the one or the other. For the syllogism to have significance there must

be, to begin with, doubt as to the nature of the minor, a doubt which the emerging admission or the emerging fact settles. Even our old friend

All men are mortal
Socrates is a man
therefore
Socrates is mortal

can be viewed as having some significance if we suppose that Socrates, like Paul and Barnabas at Lystra, or like Captain Cook in the Southern Pacific, had been taken for a god. Some emerging fact, his own admission, it may be, or the drawing of his blood, betrays his humanity, and, to the observer who has the knowledge in his mind that all men are mortal, makes it certain, now for the first time, that he does not stand above the possibility of death.

Lotze raises for us the image of Thought, as in the Kantian view, "standing fronting the impressions as they arrive with a bundle of logical forms in its hand uncertain which form can be fitted to which impression". There is a truth that vaguely corresponds to this fantastic conception. It is this, that our innumerable general concepts stored in memory in the shape of the words and sentences of ordinary speech, may be said to stand fronting the impressions as they arrive ready to subsume them, to assimilate them, to convert them into thoughts. In Germany, since Herbart's time, a process of the sort has been spoken of as "apperception". The known, as Avenarius expresses it, is always apperceiving the unknown. The conception appears to have been suggested by physiology. As the organs and tissues of our bodies assimilate the substances of the outward world, and, as these substances, in their turn, once they are assimilated, become organs and tissues, and assimilate yet other substances, so our minds assimilate impressions which, in their turn, become parts of our minds and again assist in the assimilation of other impressions.

If we endeavour to conceive of the mere passage before our minds of the continuum of impressions without any antecedent general knowledge in the shape of inherited language ready to subsume and assimilate it, I think we shall be driven to the conclusion that consciousness, as we know it, would not, in such circumstances, emerge. It is quite possible to distinguish consciousness *plus* memory from consciousness without it. In the adjustment of our muscles that we make in walking, riding, or swimming there must be some momentary consciousness that accompanies the making of them. Time was, indeed, in riding and swimming at any rate, when the adjustments that we now make "unconsciously" as we

express it, were made quite consciously, in obedience, perhaps, to instructions. Long since, however, it has become habit with us to make them while our whole attention has been concentrated on some other matter. If a mental state, even the very next moment after its occurrence, leaves no trace in memory, it may be said in a sense indeed to have existed, but it does not exist for reflection. It is not objectified. In those circumstances, introspection can tell us nothing about it. Clear consciousness seems to accompany feeling and thought only when feeling and thought have been reduced to linguistic expression. It is only in making the facts about mental states communicable to others that we make them knowable to ourselves.

Developed knowledge thus in such a case, or indeed in any case, must be regarded as never being the work of the individual mind alone, but rather as always and necessarily consisting in the co-ordination of the results accomplished by the workings of the common mind through untold ages with the present impression on the individual mind. Such a mode of viewing the subject brings home to us vividly the conception of our participation in the operations of some wider mind than our own; and is calculated to arouse the reflection that our relation to that mind is closely analogous to the relation borne by the cells of our bodies to the organism as a whole.

What I am mainly concerned to emphasise at present, however, is the duality that is discernible whenever such thoughts as those of truth, knowledge and reality present themselves. In my recent paper I had occasion to refer to Dr. Ward's view that the one sun which is the common object of ten men looking at it, since it is not the peculiar object of any one of the ten comes to be considered as independent of them all collectively, and of consciousness generally, but that this conception of the independent existence of the external object is the "fallacy of naïve realism". The view runs closely parallel to that of a philosopher who is in many respects at the opposite pole of thought from Dr. Ward, Prof. Mach.

Prof. Külpe of Bonn, in his little book on *The Philosophy of the Present in Germany*,¹ cites Mach as the leading exponent of the new Positivism. "All science," he says, "according to Mach is a portrayal of facts in thought. By facts he (Mach) understands states of consciousness."² The Por-

¹Translated from the fifth German edition by Maud Lyall Patrick and G. W. T. Patrick.

²Eng. tr., p. 36.

trayal theory is thus a valiant attempt to express and explain everything both in the inward and outward worlds in terms of these states of consciousness. That *Esse* and *Percipi* are one and the same is with Mach a doctrine that is worked for all that it is worth. He will have no supplementing of consciousness by thought.¹ "The task of philosophy," in his view, "consists wholly in the exposition of *these elements* (the states of consciousness) *and their mutual relations*."² The theory limits us "to the occasional sensations given in consciousness and their interconnexions."³

Some features of Prof. Külpe's criticism of this theory are of interest. In arguing that sensation alone cannot give us all that we call knowledge he remarks that "Without the guidance of thought and intelligent preparation every experiment would be meaningless."⁴ Mere sensations *per se* "cannot be the vehicles of those changes in our experience which we know to be independent of us."⁵

If, with Dr. Ward, we reject the independent existence of the external object as "a fallacy of naïve realism," or, with Prof. Mach, as "a metaphysical speculation," we have then plainly to face the problem of accounting somehow for the fact that the information which it is possible for sense to give us can be, and very frequently is, of a character that absolutely compels concurrence in its validity on the part of innumerable individuals at once. Let us suppose that half a dozen of us look at the barometer, and that we all find that it reads at this moment 29·8, and let us then think away completely the existence of the external object. There is now nothing whatever there but the visual sensations which have formed the basis of the reading, nothing, that is to say, but these sensations and the amazing fact of their precise concurrence for each and all of us. How are we to account for that? If its familiarly accepted cause is once completely thought away we will surely feel ourselves driven to search for a substitute. Can any substitute suggest itself, unless indeed it may be Berkeley's theory of the continual activity of God in producing parallel illusions in all our minds at once, or else the existence of some primæval arrangement akin to the pre-established harmony of Leibnitz; and will any one seriously maintain in these days, that such hypotheses are in truth more acceptable than the popular view of the independent existence of the external object? When we inquire

¹ In this respect Mach appears to have modified his position in a recent work, *Erkenntnis und Irrthum*.

² The italics are Prof. Külpe's.

⁴ *Ibid.*, p. 43.

³ Eng. tr., p. 38.

⁵ *Ibid.*, p. 45.

into the grounds of universally accepted beliefs we seldom fail to find that naïve realism can give an excellent account of itself. There is some one who is abler than Napoleon, who is subtler than Talleyrand, it is *tout le monde*.

We find then that the undeniable fact of the compelled concurrence of innumerable individuals, of all mankind in fact, as regards certain of the information furnished by our senses seems to be the main ground of the unquestioning acceptance by common sense of the belief in the external world. The recognition of this concurrence again is of course possible only through intercourse, and we are thus led afresh to the conclusion that it is intercourse which ultimately furnishes us with this, the most elementary of all our knowledge.

How does it do it? The type of reasoning on which such knowledge is based appears to be the argument back from effect to cause. The compelled concurrence is the effect, and our minds, co-operating with other minds, may be said in a sense to set up the external world as the cause of this phenomenon. This procedure is, of course, further supported by the fact that the knowledge which compels concurrence is also that which is found to be valid as the basis of predictions of the future course of events. Taken altogether we have to ask ourselves the question: Is the procedure legitimate? For the average man we know, of course, that criticism endeavours in vain to invalidate it. Is, however, the average man's reasoning philosophically sustainable? The answer to that question has a bearing on issues that are of even greater interest to mankind than the question of the existence of the external world.

In getting the length of even asking this question we have, of course, left far behind us the doctrine of the identity of *Esse* and *Percipi*, of mere sentience on the one hand and of being and reality on the other. The answer to our question is bound up with the answer to this further question: Can the causal inference, apart from immediate sentience, ever give us the knowledge of unseen and of otherwise incognisable existence. In other words: If fire is found to have melted wax in our absence, are we justified, on that ground, in thinking of the fire and the wax as realities?

If causality consisted, as the Humist formula has it, in the invariable conjunction of two facts, and in that only, we should certainly be at a loss to apply it to the circumstances in hand. Two facts in such cases as the present are not given us, but one only. The famous formula, however, we soon find, will not fit the circumstances of any case.

¹ If the notion of Cause and Effect contained in the last analysis nothing else but the thought of invariable conjunction how could the fact of invariable conjunction be continually used to prove causality. We should then be using invariable conjunction merely to prove invariable conjunction. Again, the question must surely present itself: How is it that if the meaning of cause and effect is nothing but invariable conjunction, we can use the words "cause" and "effect" intelligently long before we know anything about invariable conjunctions. If a child is asked why he is crying and answers that it is because another child has struck him, can anything be more absurd than to imagine that what is running in his mind is anything about the invariable conjunction between blows and tears, a conjunction which, for that matter as invariable, does not exist. If, however, the Humist formula will not work, is it possible to find one that is more in harmony with the facts of life?

Let us suppose that the rotundity of the earth were still unknown, but that it had been observed by navigators that, in whatever part of the world they were, the masts and sails of an approaching vessel appeared first and the hull last, and that the converse happened when the vessel receded. We should then have a conjunction of the most rigid invariability, but still no causality disclosed. When, however, we subsequently discovered that the earth was a sphere we would feel that we now, for the first time, understood the reason of the observed uniformity, that we were at last in possession of the true cause. It must surely strike any one at a glance that there is here, between the subordinate law and the true cause the relation that there is between the glimpse of a part and the perception of the whole.

Have we then, we may ask, in the conception of whole and part and the relation between the two something that throws light on the nature of the relation between cause and effect?

We may look at the question in this way. If any one without a theory to support were asked what meaning he attached to the word "Cause" he would be very likely to answer 'that which does something'. There is a shade of difference in meaning, however, between 'doing' and 'causing' which is not to be neglected. The two words are naturally and continually applied to the self-same fact, but in different circumstances and from a different point of view. I move your ink bottle while you are out of the room. That, from

¹ The following seven paragraphs are in the main summarised from an article of my own on "The Humist Doctrine of Causation," in the *Philosophical Review* of March, 1896.

my point of view, is simply 'doing something'. You come back and find it moved. On inquiry you find that my moving it was the 'cause' of its change of place. The expression 'doing something' implies that the fact as a whole is regarded in itself, while the conception of 'cause' imports that there was a gap to be filled up; that your first knowledge of it was fragmentary, but that now you can fill up the missing links. We are thus brought back to the conception, that the knowledge of the fact and its cause together is the knowledge of it as a whole, while the knowledge of the effect alone is the knowledge of a fragment only. In physical science the presentation of the manifest fragment of a fact continually constitutes the impulse that sets the inquirer hunting for its complement. The irregularities in the motion of Uranus that led to the discovery of Neptune may, for example, be regarded as such a fragment.

The problem of causation is often stated somewhat in this way. "Granted that we always conclude that everything that begins to exist must have a cause, what makes us do so? Is the belief intuitive or is it a generalisation from experience?" It seems to me, however, that what is here taken for granted itself requires examination. In what sense is it true, or is it true at all, that we at once conclude that whatever begins to exist must have a cause? If by "we" is meant the whole human race, it certainly is not true. Children and uneducated people generally accept most of the facts of life and nature as they find them, and never think of inquiring as to their cause. Savages ordinarily regard such inquiries as why the sun rises and sets, or even whether it is the same sun that rises to-day as that which set yesterday, as entirely meaningless and nonsensical.¹

Yet there are some events which raise the thought of causation as quickly and unfailingly in the mind of the savage as in the mind of the civilised man. A footprint on the sand would have made Friday, as certainly as Crusoe, conclude that it did not come there uncaused. If we inquire what such events are, as distinguished from other events, we will find that they are events which, by their very presentation, make manifest to him who observes them their fragmentary character. Any child will recognise that a face that looks at him over a wall, or a hand that is stretched from behind a screen, are not self-subsistent things, but parts of some wider unity. When he sees the body they belong to he is completely satisfied. He thinks he has the full cause before him.

¹ Lubbock, *Origin of Civilisation*, p. 251; also *Park's Travels*, vol. i., p. 265.

Besides the unity of the thing, and even in a manner before it, there is the primitive unity of the 'fact,' that is of the total presentation at any moment. Cæsar's assassination, for instance, is such a unity. The Senate House with the assembled Senate, the Dictator himself, the conspirators with their daggers, all for a moment form part of one whole; all when they separate still bear traces of having been fragments of it. To the widely pervasive fact that they do so, we owe it that it is often possible to trace out out causes from their effects alone. As in the broken solid the parts continue to fit each other, so in the broken fact we have a parallel phenomenon. The foot continues to fit the track that it has made, the finger the finger print. The wound, perhaps, still fits the instrument that caused it. In the case cited the fact was one witnessed by many persons, and capable of being reconstituted for others by their narration of its circumstances. In many other such cases, however, there is no witness of such a fact, and it often becomes our task to endeavour to reconstitute it, as best we can, from the fragments in our possession.

A very common example of reasoning of this description in practical life is furnished by what we call circumstantial evidence. It presents a familiar instance of the mode of procedure in thought from effect to cause, of the attempts that we are continually making at the reconstitution of wholes in past experience from the fragments furnished by present sense data. In a case that happened to come before me, with other Justices, at an inland town in New Zealand I well remember asking myself at the time under what description of logical form could the principal evidence be subsumed.

In the tenement of the accused who, as the result of the inquiry, was committed for trial for attempted arson, there was found a rag soaked in kerosene placed with other inflammable substances ready for lighting in such a situation that the building in which it was would have been set on fire. There was also found in the same room a torn night-shirt belonging to the accused; and, on examination, it was discovered that one edge of the soaked rag fitted with the utmost precision into the indentations of the torn edge of the night-shirt. The conclusion, backed by other evidence, was unavoidable as to the guilty intention of the accused. Mainly, at any rate, from this fragment of a fact thus given them the Bench of Justices sent the man up for trial. In doing so they were reconstituting a whole in experience of which the rag and the torn night-shirt were the remaining vestiges. Such reasoning, the reconstituting of wholes of experience from the fragments that remain to us, the setting up of unseen

causes from effects that are visible to sense is the very essence of the causal inference; and, if in setting up the independent external object as the cause of sensation we transcend sense, we only follow the same line of procedure that accompanies every hour of our practical activity.¹

How closely the thought of the independent existence of the external world is bound up with the fact of intercourse is brought home to us when we reflect that the idealism which is paradoxical is always solipsist. Of Hume's current of more or less vivid impressions and ideas this is palpably enough true. It is no less true, however, of Kant's Copernican revolution. That the objects conform to the representations, not the representations to the objects, is quite unthinkable to any one who realises and remembers that the object, in as far, at any rate, as its position, its dimensions and its figure are concerned, can correspond to identical impressions in various minds. We can readily enough conceive of the one object as causing the various impressions, but how are we to think of successive impressions in Peter's mind and in Paul's as bringing into existence the one object which is identical for both. Suppose that Peter has seen or handled the object first, can Paul's impression then create it? Is it not by hypothesis there already? We need not ask the question. The realisation of the fact of Intercourse is the Ithuriel's spears that at once transforms such fancies into their natural absurdity.

¹ To suggest in any detail other applications of the argument from effect to cause thus used would be foreign to the object of this paper. My readers will no doubt have noted for themselves its bearing on the validity of the old-fashioned line of reasoning used by our forefathers to prove the activity of Mind throughout Nature, which Kant labels, in order to dismiss it, the "Physico-Theological argument".

IV.—THE HEGELIAN DIALECTIC.

BY BERNARD MUSCIO.

1. THE argument of the Hegelian Dialectic may be stated in general terms as follows. If we attribute a predicate to some subject, we are compelled, as a result of a careful scrutiny into what we have done, to attribute to the same subject the logical contrary of that predicate. We are thus compelled to assert a contradiction. For, while two contrary propositions may both be false, they cannot both be true. The fact is, however, according to the dialectic, that there inevitably arise instances in which we are forced to believe both of two contrary propositions true. It is held that the most extreme scepticism cannot escape this result. Every sceptic can be forced to admit, by an argument similar to that of Descartes, that *something* exists. In admitting so much the contradiction is at once reached, for a predicate has been attributed to some subject. Because "Being" has been predicated, "Not-Being" must be predicated. The solution of this contradiction, according to the dialectic, is a synthesis in which the distinction between the contrary predicates, or "categories," is overcome. Each is seen to be a "moment" in a "higher" predicate. The predication of the synthesis, however, resuscitates the difficulty, since we are forced to predicate *its* contrary. A new synthesis is thus required. The disease breaking out once more, the process is continued until a predicate, "the Absolute Idea," is reached, which, when attributed to Reality, does not compel us to predicate its contrary. From the fact that "the Absolute Idea" can be predicated of Reality, it can be inferred, it is held, that the Universe is Spiritual. This conclusion concerning the Universe is, therefore, according to the dialectic, absolutely certain. Our certainty of its truth arises from the fact that we are compelled to predicate "the Absolute Idea" of Reality, if we predicate of it anything at all; and, no matter how great our scepticism, we must predicate "Being".

2. The unique characteristic of the dialectic is its synthesis of contraries in such a way as to resolve a contradiction.

Now it seems evident that this synthesis is possible only if there are contradictions to which the dialectic can be applied; that is, only if we are under the *necessity* of predicating logical contraries of the one subject. The contradictions must exist, and be recognised, before the characteristic principle of the dialectic can be adduced as their solution. Hegel, and his followers, definitely assert that they consider certain contradictions, arising, it is said, inevitably, as the *cause* of the dialectic process. It will therefore be admitted by the advocates of the dialectic that, if the specified contradictions do *not* occur, the dialectic process cannot begin. The disappearance of the dialectic will necessarily follow from the disappearance of the contradictions which it was designed to resolve.

3. The question to be considered, then, is: Are the contradictions which, it is held, *cause* the dialectic process, and thus lead to the knowledge that the Universe is Spiritual, inevitable? Two reasons *only* are urged for their necessity. (i.) It is held that the predication of one predicate of a subject "implies," or "involves," the predication of the logical contrary of that predicate, of that subject. In this case the contradictions are reached by means of the relation of "implication," or "being involved in". (ii.) It is held that the demands of the "Understanding" lead to contradictions if we apply to Reality any predicate except "the Absolute Idea". These two reasons are quite distinct, as will be clear as we proceed. The difference between them does not seem, as a rule, to have been recognised; and acceptance of the dialectic seems to have been due, in some instances, to a belief that they are identical. The fact is, however, that each attempts to prove, in a manner entirely different from that of the other, that there must arise contradictions which only the principle of the dialectic can solve. We shall consider both reasons in some detail.

4. (i) We have stated the first argument in the form that the predication of one predicate of a subject "implies," or "involves," the predication of the logical contrary of that predicate, of that subject. We wish to draw attention, first, to the phrase "predication of a predicate" in this statement.

In the writings of those who accept the dialectic the above phrase would, generally speaking, be considered equivalent to either of two others, which are in fact constantly used as synonymous with it. These are "predication of a *category*," and, "predication of an *idea*". The most usual way of stating the difficulty which, it is held, the principle of the dialectic removes, is to say that, if we predicate a *category* of

a subject, we are compelled, as a result of a close inspection of that *category*, to predicate the logically contrary *category* of that subject. According to this, the most usually accepted phraseology, "*category*" is synonymous with "*predicate*". But we frequently find in Hegelian literature the phrase "*apprehend under some category*," and here "*category*" does not appear to be synonymous with "*predicate*". What would be the meaning of apprehending something under a "*predicate*"? The question thus arises: What, in the Hegelian terminology, is a *category*?

5. This question is highly important. Strange to say, it seems never to have been asked. The meaning of "*category*" appears to have been supposed obvious, and it is perhaps due to this fact that the word has been used with incompatible meanings. It is of course clear for what *words* "*category*" is to stand. The various terms "*Being*," "*Not-Being*," "*Becoming*"; "*Logic*," "*Nature*," "*Spirit*"; etc.; are all "*categories*". But taking any one of these terms, say "*Being*," what does it denote?

Three different things must here be distinguished. There is the mere word, the name of the "*category*" to which reference is made; there is the entity itself, whatever it may be, which the word denotes; and there is the idea in the mind of the person who uses the word as a symbol, that is, the idea of the "*category*" of which the word is the name. The important question is: When a Hegelian speaks of a "*category*," what *kind* of entity does he use this word to denote?

It appears highly doubtful if Hegelians use the names of the "*categories*" in *any* precise sense. By this it is not meant that they sometimes, for instance, use "*Being*" to mean what "*Being-Determinate*" is used to mean elsewhere; but that the *kind of entity* which the name of a "*category*" denotes seems never to have been definitely decided upon. This is suggested, for example, by the fact that it is sometimes said that "*Being is an idea*," sometimes that "*Being is predicated of something*" (and we do not predicate *ideas* of anything), and sometimes that "*we apprehend something under Being*" (and we do not apprehend things *under predicates*).

6. There is a strong tendency among Hegelians to use a "*category*" in the Kantian sense, as, so to speak, a groove of the mind, a piece of mental architecture, in accord with the unyielding outlines of which, "*objects*" must accommodate themselves. The various types of judgment are then taken to be the expressions of the activity of the mind

through its structural constituents. The manifold of sense is put into "intelligible" order by the "categories". The chaos which sense (on this theory) would be in the absence of mind, is converted into a cosmos by the activity of the mind working through its "categories".

7. Though there is a strong tendency among Hegelians to use "category" in this sense, some other is absolutely necessary for the dialectic.

In the first place, it is doubtful whether the most convinced Hegelian would admit that there are special mental constructions corresponding to the several score of Hegelian "categories". Our minds are not built on this elaborate plan. To uphold the contrary position would be particularly difficult in view of various criticisms which have been urged against the "validity" of certain of Hegel's "categories" by those who accept the dialectic as a whole. Modern psychology would increase the difficulty. But even if we knew there were "categories" in this sense, and even if we knew,—as we do not know,—what were the relations between them, to argue from these to the nature of Reality would be, as the phrase is, a very crude piece of subjectivism. Are we to say that there is a reality corresponding to any curious kink our minds may happen to possess?

In the second place, the relation of "implication"—whatever it be,—which is the instrument by which, according to the argument we are considering, the contradictions are generated, cannot possibly hold between Kantianesque "categories". This relation is said to hold between certain entities, whose precise nature is not defined, which are *predicated*. It is evident that we cannot predicate Kantian "categories". Yet if the contradictions are to be obtained, logically contrary "categories" *must* be predicated. Consequently, "category" cannot be used in the Kantian sense.

8. A "category" as *used*, not as *defined*, by advocates of the dialectic, appears to be simply the defining function of a class. In most usual philosophical terminology, a Hegelian "category" is a *predicate*, simply, in the widest sense of this term. When, for example, it is said that "Being" is a "category," what is meant is that there is a class of entities, each of that has a certain relation to the *predicate* "Being". Again, the "category" of "Life" is that set of *predicates and relations*, in virtue of the possession of which, certain entities are members of the class "living beings". Similarly, the "category" of "Cause" will be that *relation* by which certain *events* are grouped together, as "instances of causation," in a certain class. And so on for the remaining "categories". If this be

the correct account of the matter, it will follow that there are as many "categories" as there are defining functions of classes, that is, an infinite number; and the dialectic will be a selection from all possible "categories". The "categories" which constitute the stages of the dialectic would be those which stand in such a relation to each other, as leads the advocates of the dialectic to believe that they can proceed, by means of them, to the conclusion that the Universe is Spiritual.

9. We are now in a position to deal with the argument which states that the predication of one predicate, of a subject, "implies," or "involves," the predication of the logical contrary of that predicate, of that subject. In considering this argument we might investigate it in its application at *any* part of the dialectic process; but we shall choose for this purpose the starting-point. There are two reasons for this choice. The first is that the criticisms we shall make seem slightly clearer with regard to this part of the dialectic than with regard to other parts: a fact which is due to the greater simplicity of the first "categories". The second is that if we show that the dialectic process never begins, it will be perfectly clear that it never reaches *any* conclusion; whereas, if we showed that there is a fallacy at some point after the beginning, it might seem that this could be rectified. But our criticism is equally valid against *any* part of the dialectic.

10. The dialectic begins, then, from the consideration that an absolute scepticism is impossible. To say, "there is nothing," or "there is no truth," is to refute oneself. There is at least the act of mind which asserts "there is nothing," and it is true at least that "there is no truth". This is familiar ground, and need not be laboured. The dialectic tells us, to begin with, that we must admit that something *is*; and this we must admit, even though we assert that we are entirely ignorant *what* the something is.

This position is taken to mean that the "category of Being is valid"; and this means that we can truly predicate "Being," a simple predicate, of something. It is then pointed out that all that the sceptic must admit is the existence of the *merest* something. Indeed, whatever the thing be, "something" is too definite a word to indicate it. The sceptic must admit that "something is"; but his admission must be interpreted in such a way that, whenever it is asked whether some particular thing is that which the sceptic admitted, we must assert that this particular thing is *more than* the sceptic admitted. The "Being" that is predicated is, as Hegel and his disciples

say, "Pure Being". It is "Being-apart-from-all-determinateness".

The next advance is to assert that "Being-apart-from-all-determinateness" is essentially what we mean by "Not-Being". It is held that this identity of meaning enables, or rather compels, us, to predicate "Not-Being" wherever we predicate "Being" ("Pure Being"). But, according to the dialectic, "Being" and "Not-Being" are logical contraries. Consequently, to predicate both of one subject is to assert a contradiction. We thus require the synthesis "Becoming" to solve the difficulty.

Stated in a perfectly general way the contention assumes the following form: We are compelled to predicate P of S; otherwise, according to the dialectic, every assertion is a contradiction. We then find that P is, *in some respect*, identical with Q. Let us suppose that the "in some respect" is *not* a necessary qualification, and that we have: "We then find that P is identical with Q". The result is that we are compelled to predicate Q of S; or rather, in predicating P we have *ipso facto* predicated Q. We have now predicated of S both P and Q. We did this because we supposed Q identical with P which we were *compelled* to predicate of S. This was the justification of, and the *sole* reason for, our action. On closer investigation, however, we discover that the "in some respect" is a necessary qualification; that while we *mean* by P the same as we *mean* by Q, P and Q are really *logical contraries*. Finding that both are predicated of the one subject we recognise a contradiction, and, according to the dialectic, one solution only is possible, namely, the merging of the differences of P and Q in the synthesis R.

11. We submit, briefly, that if P and Q are identical, we predicate Q in predicating P; but that, if P and Q are identical, they are *not* logical contraries, and the joint predication of both of them of one subject presents nothing to synthesise. On the other hand, if P and Q are logical contraries, there is not the slightest ground for the predication of the one in the fact that we have predicated the other. And here, also, there is nothing to synthesise.

12. There appears to be an extraordinary confusion in the dialectic between predicates and the ideas of predicates. The dialectic seems to say that the *ideas* of logically contrary predicates are identical,—which is itself an amazing statement,—and that we are therefore compelled to predicate logically contrary predicates of the one subject.

Consider the terms "Being" and "Not-Being". The advocates of the dialectic have repeatedly said that the *ideas*

of "Being" and of "Not-Being" are identical. The idea of "Being" is the idea of "Pure Being," not the idea of "Being-Determinate" but of "Being-apart-from-all-determinateness". This, it is said, is what we mean by "Not-Being". It is *definitely asserted* that, if we examine what we mean by "Being" and "Not-Being," we are unable to discriminate between our meanings.

So far, however, we are in the realm of *ideas* only. And what have ideas to do with the point at issue? We certainly do not predicate the *idea* of "Being" of anything whatever, nor do we predicate the *idea* of "Not-Being" of anything whatever. Even supposing the contrary, no contradiction would be generated, since it is asserted that the *ideas* are identical. If it be admitted that we do not predicate ideas, what explanation of the procedure can be adduced? The logically contrary predicates, it may be said, are, of course, *not* ideas; but we predicate logical contraries because our ideas of them are identical. This, however, is clearly false. If the idea in the mind of a person when he uses "Being" as a symbol is *not discriminable* from that in his mind when he uses "Not-Being" as a symbol, it is simply contradictory to say that the person means one predicate by "Being" and its logical contrary by "Not-Being". He means the same thing by the two words.

13. We have supposed,—what is absurd,—that ideas may be used as predicates. It would generally be admitted that this supposition is absurd. Nevertheless, it is this absurdity which seems to have been committed by the dialectic. Because of an identity between ideas of logically contrary predicates, in "affirming Being," it is said, we are "affirming Not-Being". It is added that the ideas manifest an "identity in difference". This means that they are "identical" in one part, and "different" in another; that one is Xy and the other Xz . The difference must be temporarily suppressed when it is said that in "affirming" the one, we are, *ipso facto*, "affirming" the other. By virtue of indiscernibility of "difference," and by virtue of this alone, Xz is "affirmed" when Xy is "affirmed". The suppressed "difference" is then brought forward, and there is considerable astonishment over the fact that ideas, which could not be discriminated from each other, are really logical contraries. The simple solution is that meanings have been altered to suit the stage of the process.

14. To "affirm Being" is to predicate existence of "something". If there is in reality a predicate corresponding to our *idea* of "Being," when we use that *idea* in "affirming

Being" we are making a true judgment. If we use an idea different from the idea of "Being," it matters not how slight the difference and how great the similarity, we do *not* know that, because there is something in reality corresponding to the idea of "Being," there is *also* something in reality corresponding to this other idea. It is a fallacy, therefore, to "affirm" the one on the ground that we have "affirmed" the other. If we make two judgments, of which each attributes the same predicate to the same subject, we make no advance in thought in making the second of the two; but if, as is necessary for the occurrence of the contradictions on which the dialectic relies, our two judgments attribute each a different predicate to the same subject, we are not justified in making the one judgment when we have made the other, on the ground of a *point* of identity between, either the predicates, or the ideas of the predicates.

The dialectic requires that the relation of "implication" should hold between logically contrary predicates. We would thus be able to infer "S is Q" from "S is P," where Q and P are logically contrary predicates. Curiously enough, no contradiction now results. If logically contrary predicates "implied" each other in the above way, there would be instances of two contrary propositions *both being true*. It is generally assumed that two contrary propositions cannot *both* be true, and the dialectic accepts this assumption. On the above theory, however, two contrary propositions would *both* be true, and there would be an end of the matter. The difficulty which the principle of the dialectic is directed to remove is that we are compelled to *believe* true both of two logically contrary propositions. Yet, if we ask why we are compelled to such a belief, we are referred to "implication" between logically contrary predicates; but this, clearly, is a false theory, and, even if true, would not generate the contradictions. The fact seems to be that the reason for asserting our compulsion to this belief is to be found in the asserted "indiscernibility of meanings" of logically contrary predicates; the relation between *meanings* being transferred to predicates without the confusion being realised.

Put otherwise: the relation of "implication," as used by the dialectic, must hold *either* between predicates, *or* between entities other than predicates. If it holds between predicates, no contradiction is generated, since then two contrary propositions can *both be true*. Consequently, "implication" must hold between entities other than predicates. We discover that these entities are the *ideas* of the predicates, and that the relation between them is that of identity, or partial identity. If it

is identity, the predicates of which they are ideas *cannot* be logical contraries. If it is partial identity, we cannot legitimately attribute to a subject the predicate corresponding to the one, because we have attributed to it the predicate corresponding to the other. Here, also, no contradiction is generated.

15. We conclude, therefore, that so far as the argument we have considered,—which is the fundamental argument adduced in support of the dialectical principle,—is concerned, the dialectic can never begin. For no contradiction of the kind upon which the dialectic relies for its beginning, and advance, can possibly be generated in the way this argument asserts it to be generated.

16. (ii.) The other argument by which the dialectic seeks to show that contradictions of a certain kind are inevitable, has been stated (§ 3) in the form that the demands of the “Understanding” lead to contradictions if we apply to Reality any predicate except “the absolute Idea”. According to the dialectic the demands of the “Understanding” are two.

(a) It is said, first, that the “Understanding” demands that the various “categories,” that is, the various *predicates*, be treated as “independent,” and ultimate, entities. The force of “independent” here is that the “Understanding” demands that predicates must not be “merged” in “higher” predicates, as the syntheses of the dialectic attempt.

This contention may be criticised in two ways. In the first place, the “demand” of the “Understanding” here put forward is a pure fiction. It is false to assert that the “Understanding,” or anything else, demands *a priori* that predicates must have certain relations to each other. If such a demand were made, it should be treated, just as the Universe would treat it, as a mere piece of impertinence. It cannot be truly said that, if we think at all, we *must* treat predicates as “independent,” and ultimate, entities. The chief condition for precise thinking is that we keep our *ideas* definite and distinct, whether they are ideas of predicates, or of subjects. We do demand that, if two predicates are two, that is, if they are different, they shall not be regarded as one. We demand that distinction and difference, where they are discovered, shall be recognised, and acknowledged. But the “Understanding” which demands, *a priori*, that predicates shall stand in certain relations to each other, must, surely, be the “Understanding” of primitive man. We deny, therefore, that this particular “demand” is a demand.

Granting, however, what is plainly false, that the "Understanding" does make this demand, what follows? Either, the Universe will satisfy it, or it will not. The theory proceeds to say that this demand *cannot* be satisfied, because, to predicate any *one* "category," regarded as "independent," and ultimate, of reality, is to reach a contradiction. But how does this contradiction arise? It may be said to arise in the way we have already considered and found invalid, namely, by the asserted "implication" between logically contrary predicates. Assuming that this method of generating the contradiction fails, what other method remains?

One such method attempts to show that predication itself involves contradictions, that is, that the "relational way of thought" cannot move without contradictions. But, if we assert a proposition of the form "S is P," how does the contradiction arise? It could arise if we consider "S is P" equivalent to "non-P is P" and the *is* in "non-P is P" as the sign of identity. This, however, would be an error; and if *is* be taken as the predicative copula, no contradiction arises.—Again, it is said that mere relatedness involves an infinite regress of a vicious character, and that in this fact the "Understanding" is plunged into contradictions. But until something more than reiterated assertion is adduced in favour of the infinite regress involved in relatedness, we may be content with what direct apprehension appears to reveal, namely, that relatedness involves *no* infinite regress, vicious or otherwise.—These are the only methods by which the attempt is made to prove that *any* assertion "involves" contradictions.

There is, then, no contradiction in the attribution of a predicate to a subject, though a judgment which states such predication may be false. In asserting a subject-predicate proposition, we are not asserting, nor assuming, that the predicate is an "independent," and ultimate, entity. We are not asserting *any* relation between this and other predicates. We are asserting a relation between a predicate and a subject; that is, we are stating that there is a complex of a particular kind, a unity of a particular and a universal. This contains no contradiction.

This "demand" of the "Understanding" is sometimes made still more extraordinary. It adds that some one proposition must express the *whole* truth. This, at least, appears to be what is meant, when it is said that the "Understanding" demands that "Being," for example, shall be an "adequate expression of Reality". Of course, the "Understanding" which demanded this would have perpetrated an

absurdity, and no advocate for it could be found. But whose "Understanding" demands such an extraordinary thing?—This whole argument must, therefore, be dismissed as baseless.

(b) The other "demand" of the "Understanding" is for a "complete explanation" of the Universe. Following on the assertion of this demand, it is contended that the "Understanding" cannot attain a "complete explanation," because of the nature of the "categories" which it employs. This difficulty, it is said, can be overcome by the syntheses which "Reason" waits to perform. It is added that the "Understanding" *must* allow "Reason" to perform this function, because the difficulty has arisen through a "demand" of the "Understanding" itself.

Before we are willing to admit that the "Understanding" demands a "complete explanation" of the Universe, we must be told quite precisely what is meant by a "complete explanation". After this has been done, we shall be in a position to decide whether the "demand" is a fact, and also, if it leads, as is asserted, to contradictions.

What, then, is "explanation"? We are told that the aim of the dialectic is both the "complete explanation" and the "complete rationalisation" of the Universe; and it is held that the dialectic has accomplished its aim. "Explanation" is, then, "rationalisation". But what is "rationalisation"?

The first step in the attempt to prove that the Universe is "completely rational" is to prove that it is "partially rational". This is supposed to be accomplished when it is shown that there is at least one true proposition, for example, "something is". To apply a predicate to a subject is, therefore, "to rationalise" partially, and, consequently, "to explain" partially, that subject. It would seem from this that any subject would be *completely* "explained," or "rationalised," if we knew all the propositions concerning it which were true. And this is *part* of what is meant by "complete explanation". It is said that "the Absolute Idea" is the only "category" which *completely* "explains" everything. "The Absolute Idea" is said to have the "lower categories" "implicit" in it. In predicating "the Absolute Idea," one is, therefore, *ipso facto* predicating all the "lower categories". If this, however, were all that the dialectic means, its contention would be trivial. No particular subject except the Universe could be "completely explained" or "completely rationalised," if this result with regard to any subject followed only when "the Absolute Idea" could be predicated of it. For of no subject, except

the Universe, are *all* the "categories" truly predicable. To say that "the Absolute Idea" is predicable of the whole of reality, means, so far, only this: that within the Universe *all* the "categories" are, somewhere or other, to be found. This is not a particularly novel, nor important, statement. It cannot be *merely* this meaning of "explanation" which the dialectic has in view when it accuses the "Understanding," in demanding a "complete explanation," of demanding something which it cannot attain without contradiction. For this meaning of "explanation" does not lead to contradictions.

In attempting to discover what this asserted "demand" of the "Understanding" is, we may compare it with another which is frequently, but inconsistently, associated with it. This is the demand for "complete knowledge". We recognise that the *ideal* of "complete knowledge" is legitimate, and that it is compatible with very great present ignorance. But ignorance, when brought face to face with the "demand" for "complete explanation," is supposed to generate a contradiction. Whence arises this difference between "complete knowledge" and "complete explanation"?

It is a significant fact that, when illustrations of the contradictions, which are supposed to be "involved" in this "demand" of the "Understanding," are given, they have almost always some reference to causality. On closer examination we discover that this demand for a "complete explanation" is a demand for a "complete knowledge" of all the causal relations in the Universe. The "Understanding," it is said, demands that every piece of knowledge should be a knowledge of the *whole* cause of some "fact". This demand, it is asserted, is contradictory, because we never know the *whole* cause of *any* "fact". It is said that the cause of one phenomenon is to be found in surrounding phenomena, and that the sphere of "explanatory" phenomena gradually increases until it contains the whole of the present state of the Universe, while this again must be causally "explained" by prior states of the Universe, and a vicious infinite regress is the result. The "Understanding" demands, but can never obtain, because of the self-contradictory character of the demand, the knowledge of the cause of everything. This is the essence of the difficulty which the dialectic raises against the "Understanding".

Apart from the meaning of "cause," as used by the dialectic, consider this "demand" of the "Understanding". The "category" of cause is, for the dialectic, one among a large number. We have defined a "category" as the defining of

function of a class. The "demand" that we should know completely the causal relations in which every constituent of the Universe stands to every other, is, as interpreted by the dialectic, a demand that all the constituents of the Universe should be members of some one *selected* class. It is clearly conceivable that there might be constituents of the Universe *not* causally related. The "Understanding" is thus supposed to "demand," *a priori*, that this possibility is not the case. The most natural question to ask here, is: What right has the "Understanding" to make this demand? And the answer is, briefly, that it has no right whatsoever. If we are to decide, *a priori*, what are the various relations which unite entities, our results, to say the least, will have a very ambiguous worth. Further, it seems utterly false to say that the "Understanding" makes this demand. This will appear from an examination of the Hegelian meaning of "cause".

The dialectic assumes that one entity, not one *event*, is causally related with other entities. It thus uses "cause," most generally, to mean "efficient cause". It carries the doctrine of "efficient causality" to the extreme by asserting that every *entity* is the partial "cause," and the partial "effect," of every other. The difficulty which the dialectic brings forward then seems to arise thus. *Any* and *every* piece of knowledge is supposed to be a knowledge of "causality". The knowledge of the "cause" of any one entity is supposed to require a knowledge of the "cause" of *all* entities. We are supposed not to have this knowledge. Consequently, it is said, we have no knowledge,—a self-contradictory statement.

It should be pointed out, first, that if "cause" be used in the scientific sense to indicate the subsumption of *events* under laws, no contradiction can be generated from it. It must then be asked whether the *Hegelian* theory, that every entity determines partly, and is partly determined by, every other, is really a demand of the "Understanding". It must be asked, further, whether, if the dialectic knows this theory to be true, we have not even now a *complete* knowledge of "causality". This the dialectic denies. What is *really* denied, however, is that we have a complete knowledge of all causal laws, that we have a complete knowledge of "cause" in the scientific sense of the term. The appeal to this meaning of "cause" at this point is quite illegitimate. The argument requires one meaning of the term to be used throughout. If the scientific meaning be adopted, there is no contradiction in this "demand". On the other hand, if

the characteristically Hegelian theory of "causal" interdependence be accepted, we already know the whole truth about causality, and the only apparent way in which our knowledge could be increased would be by the direct apprehension of every constituent of the Universe. This, however, would not affect the reciprocal interdependence of the parts of the Universe. But how do we attain the knowledge of this interdependence? The fact is that it is an assumption, which the "Understanding," on discovering its character, is very willing to discard.

It must always be illegitimate, and fallacious, to suppose that the human mind demands something which *may* not be the fact. Here, the "demand" of the "Understanding" is equivalent to the assertion,—for the making of which there appears to be no explanation but an attenuated imagination,—that the Universe has a character, which, conceivably, it *may not* have. This contention seems to have been largely due to the failure to recognise what is the scientific meaning of "cause," and to the adoption of a somewhat anthropomorphic notion in its place. This notion is found to generate difficulties. If so, why not at once cast it aside? It is not necessary for thought, especially since *not* every proposition expresses a "causal" relation. It probably seemed to the reflective savage that the "Understanding" demanded that a thunderstorm be regarded as the activity of a malignant god; but we have outgrown that demand. It seems high time that we should reject those "demands" with which idealistic philosophy has so constantly attempted to reach the nature of the Universe.

The demands of man are relevant in psychology, in ethics, and chiefly in life. The one demand of the philosopher which is worthy of veneration is the demand for the truth; but this means that he shall be willing to class entities where they belong. When, in general, the demands of man are referred to, it is important to know a great deal about man; otherwise, the "demands of man" are likely to be the personal demands of the speaker. What doctrine is more peculiarly *Hegelian* than the doctrine that every constituent of the Universe is partly the "cause" of, and is partly "caused" by, every other? It is this doctrine which the dialectic asserts to be a "demand of the Understanding".

17. We conclude that the arguments which are used to prove that the "Understanding" is necessarily "involved" in contradictions, are fallacious. If this conclusion, and our former one (§ 15) are true, the important result is reached that the dialectic must expire at its very birth, for the means

of its life,—certain specified contradictions,—are not to be found.

18. Let us now consider the distinction, insisted on by the advocates of the dialectic, and by others also, between the "Understanding" and the "Reason". This distinction is a heritage from the Faculty Psychology, and is of a kind which modern psychology cannot admit. It would be extremely rash to maintain that any conclusion of modern psychology is so certain as to be beyond the possibility of modification. Nevertheless, modern psychology is, in view of its investigations, only acting reasonably when it asks: What is the "Reason," and what the "Understanding"?

19. The terms "Reason" and "Understanding" are frequently used as though they denoted psychological facts; and in answer to a question concerning their reference, we expect, in the light of many statements in which these terms occur, to be shown two types of thought, one of which is "higher" than the other. We are at times distinctly told that the "Reason" and the "Understanding" are two "varieties" of thought; and whatever be the precise language used to denote the distinction, there is no doubt that these terms are *meant* to refer to psychological phenomena. From various statements made by the advocates of the dialectic, we should expect to find some such theories of the two as that the function of the "Understanding" is to judge, while "Reason" possesses insight; or, that the "Understanding" can pass round the externals only, of things, while "Reason" penetrates to their very essence; or, that the "Understanding" is merely descriptive, while "Reason" is interpretative. But while all this is suggested, no precise theories are offered. Instead of psychological analysis, which is merely adumbrated, we are given *two different theories of Reality*, of which one, it is said, is held by the "Understanding," and is riddled with contradictions, while the other, it is asserted, is held by the "Reason," and is self-consistent and satisfactory.

20. The theory of the "Understanding," as stated by the dialectic, is pluralistic. It tends to over-emphasise distinctions, even to the point of denying that certain relations unite entities into wholes. The theory of the "Reason," as stated by the dialectic, is monistic. It tends to deny differences, and to assume *a priori* a principle of intimate unity.

21. The important point to note is that the sole philosophical question relevant to these two theories does not concern their supporters, or their originators, but their truth. One kind of argument might question whether there *are* two

varieties of thought. It might suggest that "Understanding" is merely a name for exactness, and "Reason" a name for a number of mystical and anthropomorphic tendencies, whose vogue is passing. It might urge that thought is essentially one. Some such argument *might* be adopted, and *might* be successful against the use that is made of the terms "Reason" and "Understanding" by advocates of the dialectic. The essential point, however, lies elsewhere. It must be recognised that, whatever distinctions may be discovered between mental phenomena, the distinction between "Reason" and "Understanding," as used by the dialectic, is really between *two theories of Reality*. The dialectic wishes to show that one of these theories is true, and to discredit the other. It seems to have been accepted, because of some misapprehension, that "Reason" is "higher" than the "Understanding": certain *desires* have then been supposed "demands" of "Reason"; finally, it seems to have been believed that, since "Reason" is "higher" than "Understanding," the "demands" of "Reason" must be realised.

It is useless, however, to urge in proof of the falsity of a certain theory that it is held by the "Understanding". It is even more: to introduce, as the dialectic does, the distinction between the "Reason" and the "Understanding," is to draw a red herring across the track. We repeat: the distinction is simply between two philosophical theories; and the sole question, provided they are both clearly stated, is: *Which, if either, is true?* The "backers" of a theory do not determine its truth.

22. We conclude that the distinction between the "Reason" and the "Understanding," as used by the dialectic, denotes merely a distinction between two philosophical theories. It should be remembered, also, that modern psychology admits no such distinction between mental phenomena.

23. If the preceding criticisms are sound the Hegelian dialectic, considered as a metaphysical argument, is invalid. The opposite conclusion has been, and is, upheld, by a considerable number of philosophers. It is difficult to understand that there could be such advocacy of the dialectic as there undoubtedly has been, and is, if the dialectic did not deal with facts. These facts, however, may not be those with which its advocates believe it to deal. Indeed, if our conclusions are valid, this must be the case. Consequently, the question very naturally arises: What are the facts with which the dialectic deals?

24. The dialectic appears to be an analysis of psychological phenomena only. It has been urged by others that the dialectic is "subjective". It is not in general clear what this criticism means, and we shall not state our interpretation in that form. It is necessary to remark, however, that the various replies, by those who accept the dialectic, to criticisms against it on the score of its "subjectivity," seem to be little else than attempts to show that Hegel certainly *meant* the conclusions of the dialectic to be "objective," to apply to all Reality. But was this doubted by those who asserted that the dialectic is "subjective"? Their point surely was that the facts, upon which the dialectic is based, do not allow of a valid inference to all reality; and this contention is not met, satisfactorily, by saying that Hegel believed otherwise. It can only be met satisfactorily by showing that the inference is valid. It is doubtful, however, as a rule, just what are the facts with which the dialectic, according to those who criticise it as "subjective," is supposed to deal.

The theory here put forward is that the dialectic is a treatment of the question of *meaning*, a question of the first importance in psychology, where it has received little attention, and of even greater importance in metaphysic. One of the chief aims of thought is to discover the relations which hold between the entities, which, we believe, are the objects of our ideas. We are generally so busily engaged in the attempt to realise this aim, that we sometimes forget that we are using ideas, and tend to think that the ideas are the things. We fail, also, to recognise the manner in which meanings come to birth in our minds, and in what relations they stand to each other once they have made their appearance. We have acquired the habit of thinking of ideas as though they possessed the rigidity of chunks of wood, or pieces of quartz. We do not recognise how perfectly fluid the world of ideas is. Yet here, if anywhere, is to be found the Heracleitean flux. The possibility of exact thought, depends upon the possibility of keeping ideas, or meanings, definite,—a task which is always difficult. Once we have "got" an idea, we are, curiously enough, inclined to think that it always was perfectly definite; that its edges are just as clear-cut and well-defined as are those of the entity to which it refers. Yet it is the most commonplace experience that, notwithstanding all our efforts, our ideas are constantly merging into one another. To-day we associate with a certain symbol an idea which is different from the idea we associated with it yesterday. Even in the one discourse as we speak, in the one paragraph as we write, we have to watch

our meanings most carefully lest they change,—it may be ever so slightly, yet sufficiently to render our conclusions invalid. All the emphasis which has been laid upon the importance of the middle term of the syllogism is due to the tendency of meanings to pass, quietly and unostentatiously, into one another.

Meanings are like gases: sometimes they mix without noticeable result, gliding imperceptibly into each other; sometimes they sparkle into vitality at the merest contact. Similarity between ideas renders them dangerous for thought. Differences are frequently unnoticed because of the fact that images are generally associated with ideas, and often mistaken for them. The same image may be associated with several different ideas. We then tend to think the ideas identical. Again, different images may, on different occasions, be associated with the same idea. We then tend to think that we have had different ideas on the different occasions.

It appears practically certain that the doctrine of the identity of the *ideas* of "Being" and of "Not-Being," for instance, has been due to a confusion between ideas and images. It was believed that the idea of "Being" ("Pure Being") could have no definite image associated with it, for the reason that it was the idea of "Being-apart-from-all-determinateness," while the association with it of a definite image seemed to make it the idea of "Being-Determinate". It was believed that the idea of "Not-Being," also, could have no definite image associated with it: otherwise, it seemed to be the idea of "Something". When, then, a philosopher thought the ideas of "Being" and of "Not-Being," he had in each case to repel any image which might be present, as having nothing to do with the *idea*. After this had been done, he curiously attempted to find the difference between the two ideas in difference of *images*; and, as he found no difference here, he considered the ideas identical. Since, however, the words "Being" and "Not-Being" are formally contrary, he supposed that they indicated contrary entities. It seems never to have occurred to him that, if he used "Being" and "Not-Being" to indicate *different* entities, the ideas of "Being" and of "Not-Being" *could not* be identical.

The kind of result arising from similarity between ideas may be illustrated as follows. The idea of a man is distinct enough from the idea of a woman. But the idea of a man is more similar to the idea of a woman than it is to that of an ape. Suppose now that some person is interested in the

Suffrage question, and desires to prove that some proposition is true of men, as opposed to women. He discusses the question, and as the discussion advances refers to earlier conditions of society. The idea of evolution is thus suggested to him, and this, in its turn, suggests the idea of an ape. He concludes by proving a proposition, which, to his amazement, is true of both men and women, as opposed to apes.

But one of the most extraordinary things about ideas is their contrast effects. One meaning becomes more significant and definite, when brought into contact with its contrary. According to the old dictum, we know a given thing more fully, the better we know its opposite. In the opinion of Nietzsche, we can tell the truth only after we have learned how to lie. From this relation between ideas one is easily led to say that an *idea* "implies," or "involves," its contrary. This may, in a sense, be true. It may be the case that we would have no idea of virtue if we had no idea of vice. But this fact must not, so to speak, be objectified; we must not think that there would be nothing corresponding to the idea, which we now have, of virtue, if we did not have the idea, which we now have, of vice.

The Hegelian dialectic appears to be a study of the way in which various meanings, generally regarded as primarily "logical," are connected in our minds. It shows how, beginning from the "simplest idea" which we possess, the idea of "Pure Being," we can pass, by gradual steps, by means of similarity and contrast, to the "highest" idea we possess, "the Absolute Idea". The various stages in this process are, sometimes, contrary ideas, though, as we proceed to the "higher" "categories," the contrary character is not so marked. Here, in the language of the dialectic, one meaning "completes" the other. It is seen that one idea gradually arises, and becomes definite, through a reciprocal backward and forward movement with another, and *vice versa*. Each adds to the other's significance, throws it into relief, and helps us to grasp it more securely. This process continues until we reach "the Absolute Idea". The Hegelian dialectic then, illegitimately, objectifies this mental process; but, so far as the dialectic is valid, it appears to be a description of the psychological process only.

25. We may now briefly summarise our conclusions. We have maintained the three following propositions:—

(a) The contradictions upon which the Hegelian dialectic relies for its commencement, and advance, do not occur; consequently, the dialectic process can never begin, and no theory of the Universe can be established by it.

(b) The theory of the supremacy of the "Reason" to the "Understanding" appears to be rejected by modern psychology, and is, in any case, wholly irrelevant to the validity of the dialectic.

(c) The dialectic, so far as it is valid, is simply a description of certain psychological phenomena, namely, of the growth of meanings and the relations between them.

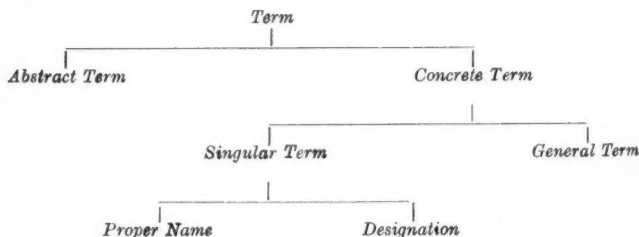
V.—DISCUSSIONS.

A PROPOSED NEW CLASSIFICATION OF TERMS.

IN the traditional Logic of the text-books, amid much that is confused, there are few things more chaotic than the usual classification of terms. And the heart of the chaos (if indeed it be sufficiently organized to have any heart at all) lies in its insistence on the distinction (derived from Aristotelian Logic) between the General and the Singular Term.

"The Distinction", writes J. S. Mill, "between *general* names, and *individual* or *singular* names, is fundamental; and may be considered as the first grand division of names."¹ Mill here uses the words "*individual*" and "*singular*" in the same sense; but their occurrence here together may suggest a doubt whether the time-honoured opposition between the General and the Singular Term, instead of being, as Mill thinks, itself "fundamental", does not involve a fundamental fallacy, since it confuses and obscures two important, true, and mutually independent distinctions,—that between the General (*i.e.* the Universal) and the Individual Term on the one hand, and that between the Singular and the Plural Term on the other.

Mr. H. W. B. Joseph regards the distinction between the Singular and the General Term as a division not of the Term but of the Concrete Term, and I venture to think that his reasons for holding this view are more instructive than he himself has noticed. His exposition² may be tabulated in the following divisional classification of terms.



¹ *A System of Logic* . . . , bk. i., ch. ii., § 3.

² *An Introduction to Logic* (Oxford, Clarendon Press, 1906), ch. ii., pp. 18-24.

Trammelled as he is by the traditional doctrine that the distinction between Singular and General Terms is absolute, so that no term can ever be both simultaneously, and holding that (as, following Mill,¹ he defines the distinction) "A general term is . . . one that is predicable of any number of individuals in the same sense", while "a singular term is one that is predicable of one individual only in the same sense", he is driven to the conclusion that (since abstract terms are not predicable of any individuals at all) "The distinction of singular and general is not applicable to abstract terms."² Thus, though degrees of generality obviously belong to many abstract terms,—though "Quality" is more general than "Colour", and "Colour" (as Mr. Joseph himself seems to allow) is of higher generality than "Blue", and "Blue" than "Peacock-blue", yet none of these can, according to Mr. Joseph, be called a general term; and, although abstract terms are almost always of singular form, yet no abstract term can ever be called singular.

This is only one out of many anomalies and inconsistencies which inevitably result from the traditional opposition of the Singular to the General Term. If our primary distinction were that between the Individual Term (*i.e.* the term of particular application) on the one hand and the General Term (*i.e.* the Term which indicates an universal) on the other, and if secondary distinctions were made between Singular and Plural Terms, then these anomalies would disappear. A general term might also be singular, and an individual term might be plural; while all abstract terms, since they indicate universals, would be, in the new sense of the word, "general".

Further, although the division of the Singular Term into the the Proper Name and the Designation seems at first sight to be an obvious and serviceable distinction, yet here again we are confronted with the absurdity of regarding *plural* Proper Names such as "The Andes" and "The Pleiades" as singular terms; and it surely may be doubted whether a term of such definitely individual application as "The ears of Midas" or "The Cheshire Cat's whiskers" ought not to be regarded as a plural designation rather than either a "general" or a "singular" term.

Not to speak of the sufficiently obvious fact that the examples usually given of general terms are more often of singular form than not, it is also quite evident that plural terms are so far from being necessarily general that in many and indeed most cases they are as individual as any singular term can be. When an oculist says to me "*YOUR EYES are of very different focus*", it is very certain that the *subject-term of his proposition* is neither the general class-term "*Eye*" nor any other general term that could be proposed. On the other hand it obviously is not singular. Nor is there any way, on the basis of the traditional division of the

¹ *A System of Logic* . . . , 1.c.

² *Ibid.*, p. 24.

Term, to reduce such a statement to (so called) strictly "logical" form¹ without violently distorting its meaning. It is difficult to believe that any self-respecting logician can really be content with such artificial absurdities as "*Your-right-eye is an-eye-of-which-the-focus-differs-greatly-from-that-of-your-left-eye*" or "*Your-pair-of-eyes is not a pair.*"

This line of argument would seem to suggest a new classification of Terms, which would recognize both the Singular General Term on the one hand and the Plural Individual Term on the other. Another distinction—that between the Determinate and the Indeterminate Term—would, I am convinced, be both useful and important, though I have not space adequately to defend it here.

That terms of the form "an s" (referring to an individual member of the species S) may be individual and not general terms is recognized by Dr. Venn,² who tells us that they were formerly called "*individua vaga*", and himself acknowledges them to be "truly singular names". Strangely enough, however, he seems to recognize them only as subject-terms, and of their possible use as predicates he says nothing whatever. But to regard such terms as individual subjects, while, when they are used as predicates, we call them *general* is clearly impossible. If, when I say "*A POODLE is in my possession*", my subject-term is individual, then when I say "*My dog is A POODLE*", my predicate is certainly not a class-term.

But as soon as we recognize this, it becomes evident that plural terms of the form "s's" (referring to individual members of the species S) are also not general terms at all. It would be absurd to say that the proposition *My dog is a poodle* has an individual predicate, but that *My three dogs are poodles* has for its predicate any kind of general term. The second predicate is indeterminate and plural, not determinate or (like the first predicate) singular; but its application to individual objects is quite as unmistakeable as that of the former predicate, and it is quite as far as that from being identical with the general class-term *Poodle*. So also not only are the singular determinate terms *This poodle* and *The poodle who lives next door* individual terms, but the plural determinate terms *These poodles* and *The poodles I have known* are individual too.

We have, further, to consider singular terms of the form "a g" (referring to a species or kind of the genus G), and plural terms of the form "g's", referring to *kinds of G*. These are not infrequent, and they are all, in a sense, general terms. When I say that *The Chimpanzee is AN ANTHROPOID APE*, I mean not that he is an individual anthropoid ape, but that he is a *sort of* Anthropoid

¹ I am not prepared to defend this expression.

² *The Principles of Empirical or Inductive Logic* (Macmillan & Co., 1889), ch. vii., p. 168.

Ape; and when I say that *some VELVETS wear well*, I mean that certain *kinds* of Velvet do so; and to these *indeterminate* specific or (to use a more correct word) *indeterminate special* singular and plural terms there are corresponding *determinate* special terms. When I say that *The Gorilla is THE MOST ANTHRO-POMORPHIC APE*, I mean that he is *the kind of Ape* that most nearly resembles Homo; and when, after describing the Gorilla, the Chimpanzee, the Orang-utan, and the Gibbon, I go on to say that *All THESE APES belong to the Family Simiidae*, I mean that all *these kinds of Ape* are classified under that Family-name.

Over against all these forms of the *Special Term* we have the *General Class-name* not expressed as one out of a number of co-ordinate species. To this we may give the name of *Generic Concept Term* so as to distinguish it from the *Special Terms* just now cited. But this name is, of course, to be understood only in a relative sense, and not as precluding that aspect of any generic term in which it is seen to be a species of some higher genus.

I give on next page the proposed Classification of Terms in tabular form.

I cannot here defend at length this proposed classification. Its value could be tested only by a detailed inquiry into its application in relation not only to Proposition but also to mediate and immediate Inference, and I cannot within the limits of this article attempt any discussion either of the few obvious difficulties which this application would present or of their (I think equally obvious) solutions. I propose therefore merely to comment on two of the most prominent features of this new classification-scheme, namely (A) the distinction between the Singular Special and the Singular Individual Terms, and (B) the admission of Determinate Plural Terms.

A. If Mr. Bertrand Russell is right in declaring that "A logical theory may be tested by its capacity for dealing with puzzles",¹ then it is relevant to claim for the distinction between the *Singular Special* and the *Singular Individual Term* that it affords the only solution for logical puzzles of many different kinds. As a single example we may cite a syllogism given by Prof. Jastrow in the *Journal of Education* (February, 1897), and quoted by Dr. Keynes.²

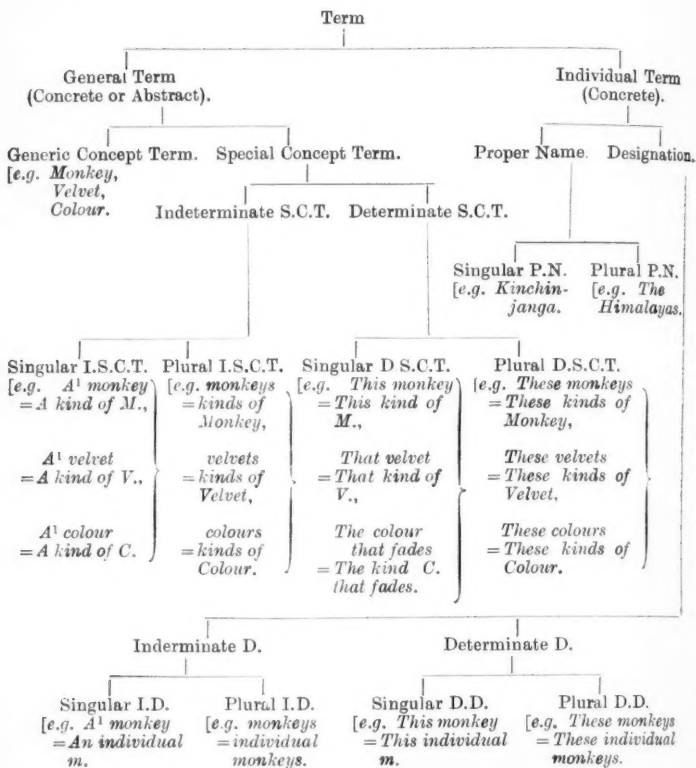
If you grant, says Prof. Jastrow, that *A is B*, I can prove therefrom that *B is A*. For either B is A or it is not A.³ "If B is not A, then by our first premiss we have the syllogism—*A is B*,

¹ "On Denoting", an article in *MIND*, New Series, vol. xiv. (Oct., 1905), p. 484.

² See *Studies and Exercises in Formal Logic* . . . by John Neville Keynes, M.A., Sc.D., Fourth Edition (Macmillan & Co., 1906), p. 438, section 404.

³ I have here slightly modified the wording, in order to avoid the use of the so-called negative term, *not-A*.

B is not *A*, therefore *A* is not *A*, which is absurd. Hence it follows that *B* is *A*."



Now, this argument would, of course, break down if we were to insert quantity-marks, for we cannot say *Either all B's are A's or no B's are A's*, but only *Either all B's are A's or some B's are not A's*; and this would give us, instead of Prof. Jastrow's valid syl-

¹ We must bear in mind that our Indefinite Article is ambiguous. "*A monkey*" may mean either *A certain monkey* or else *Any monkey*,—it may mean either *Simia quaedam* or *Simia quaelibet*. Thus each of our two kinds of Singular Indeterminate Term ought, strictly speaking, to be divided into two alternative species, of which one might be symbolized by *A g* (if special) and *An s* (if individual), the other by *Any g* and *Any s*. It seems, however, hardly necessary thus further to complicate our classification-scheme, provided that we do not forget the fact that each of our singular indeterminate terms has two distinct meanings.

logism in Camenes, the invalid pseudo-syllogism AOO Fig. iv, which exhibits the fallacy of Undistributed Middle. But where A and B are both Terms of singular form the argument is perfectly valid. Where they are both Singular Individual Terms, this is as it should be, for in that case if A is B, B is A. If the brightest star in Lyra is Vega, then Vega is the brightest star in Lyra; if the dullest logical article that ever was written is this present document, then this present document is the dullest of logical articles. But if A and B happen to be abstract terms, the argument (which, according to the ordinary doctrine, must still be accepted as perfectly valid) may land us in manifest absurdity. Given the proposition: *Almsgiving is Charity* (a statement which, according to the traditional doctrine of Predicables, is perfectly legitimate), then either Charity is Almsgiving or it is not. If it is not, we have either Prof. Jastrow's syllogism in Camenes or the more natural argument in Celarent:

Charity is not Almsgiving

Almsgiving is Charity

∴ Almsgiving is not Almsgiving.

This being an absurd conclusion, we must admit the proposition "*Charity is Almsgiving*", and we thus find ourselves making a ridiculous statement which identifies the farthest-reaching and the most universally inclusive of virtues with one of the least important of its species. As soon as we recognize the fact that "*Charity*", the predicate-term of the given proposition, is *special*, and means *A KIND OF Charity*, our syllogism is convicted of Ambiguous Middle; and the difficulty entirely vanishes, for the Proposition *Almsgiving is a kind of Charity* is, obviously, simply convertible, and no one need hesitate to admit that *A kind of Charity is Almsgiving*.

B. A still more important feature of this new classification of Terms is the admission of *Determinate Plural Terms*. These, though in very frequent use, are altogether ignored by the ordinary classification. *Indeterminate Plural Terms* indeed are not ignored, since they are all (as I think erroneously) treated as General Terms; but *Determinate Plural Terms*, whether Individual or Special, can find in the usual scheme no place at all. Their recognition as possible subject-terms makes easy and natural the reduction to the form of Subject and "Predication",¹ or even to that of Subject, Predicate, and Copula, of certain propositions which Dr. Bradley has assured us are irreducible, and which un-

¹ See *Logic, or The Morphology of Knowledge*, by Bernard Bosanquet, M.A., LL.D. (Oxford, Clarendon Press, 1888), vol. i., pp. 80, 81, 83.

doubtedly are irreducible so long as we are tied down to the traditional classification of terms.

Thus the most baffling examples of this irreducibility that even Dr. Bradley can discover are propositions of the form: "A and B co-exist", "A and B are equal",¹ "A and B are synchronous", "C and D lie east and west".² Nothing could be more natural than to regard these statements as equivalent to propositions having for their subjects determinate plural individual terms such as *The conditions known as A and B*, *The quantities A and B*, *The events which appear in history as A and B*, *The positions in space indicated by the letters C and D*. Thus their reduction to (so called) "logical form" becomes not only possible but easy and obvious. The "torture" which Dr. Bradley so humanely deprecates is altogether uncalled for.

We have already noticed above the use in ordinary discourse of determinate plural terms as subjects. Nothing is more common than such determinate plural special subject-terms as *The four kinds of Categorical Proposition* or such determinate plural individual subjects as *The days of this week*, *My parents*, *The wheels of my bicycle*, of which none can be regarded, from the standpoint of the ordinary classification, as either general or singular. Doubtless Parent (for instance) is a general term; but to regard the term *My parents* (or any of the other terms instanced) as applicable to "an indefinite number of individuals" (the usual criterion of generality) is obviously impossible.

How can the ordinary doctrine deal with such a proposition as *The Nine Muses are daughters of Mnemosyne*? Is it to regard it as an explicable equivalent to nine propositions each having the name (or number) of a Muse as its subject? And so natural and innocent a statement as the proposition "*My cat's paws are white*", which, from my point of view, is seen to be reducible to "strict logical form" by the addition to the predicate of the one word *things* (i.e. *individual objects*), would have to be regarded by the ordinary doctrine either as an explicable, expressing in abbreviative form the four propositions *The right front paw of my cat is a white object*, *The left front paw of my cat is a white object*, and so forth, or else as an illogically expressed statement which must be reduced thus: *The-group-of-objects-of-which-each-member-is-a-paw-of-my-cat is a-group-of-white-objects*. Is this reduction to "logical form", or is it not rather a *reductio ad absurdum*?

Similar (though perhaps not always so obvious) absurdities attend the so-called "reduction to logical form" of all other propositions of which the subjects are plural proper names, plural determinate designations, or plural determinate special terms. As for such historic statements as

¹ See *The Principles of Logic* (Kegan Paul, Trench, & Co., 1883), p. 14.

² *Ibid.*, p. 23.

*"The Owl and the Oyster
Were sharing a pie",¹*

the ordinary doctrine is at its wit's end to know how to deal with them. From the standpoint of the proposed new classification of terms they are seen to present no difficulty whatever. *The creatures known respectively as the Owl and the Oyster are individuals that were sharing a pie*, though it cannot rival the neatness and finish of the original, is at least an intelligible English sentence. But a logician who holds that all non-general terms are singular, and who sees that a general subject is in this case out of the question, must at all costs find either two singular subjects or else one singular subject for the logical form of the proposition. Either he must treat the given proposition as explicable and say that it is equivalent to the two statements:

- (The Owl is a creature that was sharing a pie,
- (The Oyster is a creature that was sharing a pie

(which would give the wholly erroneous impression that there were two pies, and probably two luncheon-parties over which the Owl and the Oyster severally and independently presided); or he must say that the proposition is equivalent to *The Owl is a creature that was sharing a pie with the Oyster* (which would give an invidious and altogether unwarranted precedence to the Owl, as if the pie belonged to him and the Oyster were dependent upon his beneficence); or else he must reduce the statement to logical form in this way: *The social gathering which consisted of the Owl and the Oyster is an object that was sharing a pie*. But this last "reduction" is evidently absurd since it was only the individual banqueters who "shared", while the gathering (if two *can* make a gathering) probably ate the *whole* pie, and certainly (so far as history relates) did not share it with any one else at all.

Now, a classification of Terms, and a theory of Proposition founded thereon, which find it impossible without landing themselves in manifest absurdities to deal with some of the simplest, commonest, and most natural forms of statement, are surely, to say the least, defective.

[Since writing the above I have heard that Mr. Joseph no longer holds the view that the distinction of Singular and General is applicable only to concrete terms.]

¹ *Alice's Adventures in Wonderland*, by "Lewis Carroll", First Edition, ch. x.

SOME FUNDAMENTALS OF LOGIC.

IN her very fair and able review of my *New Logic*, Miss E. E. Constance Jones asks me several questions which it would be discourteous to leave unanswered. She asks me how, if qualitative terms, such as heavy, mortal, perfect, are destitute of extensive quantity, of denotation, we are to interpret the copula in *e.g. All men are mortal* . . . 'The only possibility seems to be that the *is* or *are* of the affirmative Categorical imports identity of denotation between Subject and Predicate'.

My reply is manifold. In the first place, I do not take extensive quantity to be the same thing as denotation. The difference is stated in my book, but the two definitions are given in different places, and they are not contrasted; Miss Jones has, not unnaturally in reading so large a book, overlooked the distinction. Extensive quantity is, in my view, applicable to, and possessed by, individuals and classes only, and only when they are contemplated as such, that is to say, in their quantitative aspect, as many or few, all or none, whole or part. Contrasted with this is intensive quantity, which is applicable to, and possessed by, qualities only, and by qualities not as individual things or classes, but in their qualitative aspect as qualifying things or classes. Classes and individuals may be all or none, many or few, whole or part, and when thus contemplated are contemplated quantitatively, and their quantity is extensive; but a quality, such as heavy, or mortal, or perfect, when contemplated qualitatively, that is to say, as qualifying an individual or a class, cannot be all or none, many or few, whole or part. It is insusceptible of these extensive quantities, and is susceptible of intensive quantity or degree only. We cannot speak of no heavy, or of many mortal, or of whole perfect, for these are extensive quantities applied to qualitative terms; but we can and do speak of very heavy, wholly mortal, nearly perfect, for these are intensive quantities or degrees, and as such are applicable to qualitative terms.

By the denotation of a quality I mean the concrete things that possess the quality, so that the denotations of the qualitative terms heavy, mortal, perfect, are respectively heavy things, mortal beings, perfect things.

The reason that the interpretation of the copula in *All men are mortal* is not immediately clear is that, in that proposition, the subject is an ambiguous term, the copula is an ambiguous verb, and the predicate, or as I should call it, the object, is an am-

biguous term. The subject is always written *All men*, but there is not the slightest doubt that the quantity is distributive quantity, and that in this, the model proposition of logic, logicians do not mean what they say, and do not say what they mean. *All men* in this proposition does not mean men collectively, it means men distributively, and the proper expression of the term is *Every man*. The predicate is similarly ambiguous. According to the unanimous teaching of logicians, the term mortal may mean *the quality of mortality*, or it may mean *the class of mortal beings*. Every logician admits that the term is ambiguous; every logician teaches that the term ought to be understood in the first sense; and every logician treats it as if it expressed the second sense. Miss Jones's question, how we are to interpret the copula, cannot be answered until it is decided in which sense the predicate is to be understood. If the predicate *mortal* is to be understood to mean *the quality of mortality*, then the copula is to be interpreted *possesses*, and the proposition should be *Every man possesses the quality of mortality*. If the predicate is to be interpreted *the class of mortal beings*, then the copula should be interpreted *is included in*, and the proposition should run *Every man is included in the class of mortal beings*. In the French expression *Quelques roses sont blanches*, the inflection of the adjective clearly points to the omission of an understood substantive, what is meant is *Quelques roses sont blanches (roses)*. The inflection abolishes the ambiguity that exists in the uninflected English.

Thus I should disagree with Miss Jones when she says 'The only possibility seems to be, that the *is* or *are* of the affirmative Categorical [necessarily] imports identity of denotation between Subject and Predicate'. In my view, the denotation of subject and predicate may be identical or may not. The denotation neither of mortality nor of the class of mortal beings is the same as the denotation of *All men* or of *Every man*. The denotation of *quelques roses* however is the same as that of *blanches roses*.

Miss Jones states, quite correctly, my doctrine that the true structure of the proposition is not *S is P* or *SP*, but is *S is related to P*. The proposition never does and never can refer to one thing only, because a proposition expresses and asserts a relation, and to a relation two related things are necessary. Therefore, in my opinion, the generalised form of the proposition is not *S is P*, but *S : P*. If it were true that the only form of the proposition, or the generalised form of the proposition, is *S is P*, then we could never express any affirmative except in the form

A is an Archer who shot at a frog.
This is the house that Jack built.
There were three logicians of Gotham.

Now as a matter of fact, but a small minority of our assertions are in this form. The great majority of our assertions are in the form

The pig won't get over the stile.
 The dog ought to bite the pig.
 The stick beats the dog.
 The fire burned the stick.

None of these propositions can be reduced to the form S is P : none of them predicates an attribute of the subject, or asserts that the subject belongs to a class: every one of them is, however, an example of $S : P$: every one asserts a relation between subject and object.

The pig—won't—get over the stile.

That expresses the relation of the pig towards getting over the stile.

The pig—won't get over—the stile.

That expresses the relation of the pig to the stile.

As most of our assertions, so most of our arguments, are conducted with propositions of this type. For instance:—

If The pig will not get over the stile unless the dog bites him,
 and if The dog will not bite the pig;
 then The pig will not get over the stile.

This is a perfectly valid argument, but it is not a 'logical' argument. None of the propositions is of the S is P type. None of them contains the copula. Every term is singular, and therefore none is distributed. There is no universal. One premiss contains three terms. If this illustration is considered beneath the dignity of the subject, it is easy to fill the same form with other matter.

If Mexico will not yield except to force
 and No country will employ force against Mexico
 then Mexico will not yield.

I do not see that any of these propositions affirms Identity of denotation with Difference of intension. There is no identity of denotation between the pig and the stile, nor between the dog and the pig, nor between the dog biting the pig and the pig getting over the stile; and though there is a clear difference between the intention of the pig not to get over the stile and the intention of the dog to make him do so, I do not think these intentions are what Miss Jones has in her mind when she speaks of intension.

What my chapter on the Ratio is mainly intended to bring out is that the several assumptions of logic with respect to the proposition are totally wrong, and transparently and manifestly wrong. It is not the case that the only verb employed in statement and argument is the verb 'to be'. It is not the case that every proposition predicates a quality (intension) of a thing (extension) or predicates that a thing belongs to a class. Logicians themselves, in their discussions upon logic, constantly make predications of other kinds, and intersperse these other predications

on the very page on which they state that predication is always predication of the quality a thing possesses, or of the class to which it belongs. Miss Jones, for instance, has, in her review, these propositions among others: 'Dr. Mercier reproaches received logic'. 'Dr. Mercier does not seem to have observed' so and so. 'We could not say A is unequal to B.' 'We must recur to the Aristotelian division.' 'He commits an error, 'Every term has two aspects.' 'Locke declares' so and so. 'I will illustrate the kind of thing.' 'It further provides a place,' and so forth and so on. Not one of these propositions is of the type S is P. Every one of them can be reduced to S : P. Not one of them predicates an attribute of a subject, or the class to which a subject belongs. Not one of them asserts identity of denotation between the subject and the predicate, or as I should say, between the subject and object. Every one asserts a relation between subject and object.

It is well known in medicine that there are certain diseases known as 'occupation cramps'—kinds of spasm that afflict those only who pursue certain occupations, and that are due to the excessive exercise of certain groups of muscles. They are strictly confined to the persons who pursue these occupations, and afflict these persons only when they attempt to pursue these occupations, and at no other time. Such are writer's cramp, hammerman's cramp, and certain others. They seem to be brought on by the monotonous restriction of the use of certain groups of muscles to certain movements having little variety. Similarly, there are certain 'occupation amauroses'—forms of blindness that afflict those only who pursue certain occupations, and that are due to the excessive concentration of attention in certain directions. They are strictly confined to the persons who pursue these occupations, and afflict these persons only when they attempt to pursue these occupations, and at no other time. They are brought on by the monotonous restriction of the use of attention to certain subjects. Such 'occupation amauroses' are alienist's blindness and logician's blindness.

Alienist's blindness prevents the alienist from seeing that there is any form of disorder of conduct except getting drunk and assaulting the police. The disease, like writer's cramp, is strictly confined to those who pursue a certain occupation. No one in any other walk of life has even a momentary difficulty in recognising that prodigality, miserliness, suicide, lethargy, obstinate resistiveness, maniacal restlessness, and so forth, are disorders of conduct, but the alienist is prevented by his peculiar amaurosis from recognising them as such, plain and manifest as the recognition is to every one who is not an alienist. The same occupation amaurosis prevents him from discriminating between insanity and unsoundness of mind. Every one else can see that there are disorders of mind, such as giddiness and illusion, that are compatible with sanity and frequently occur in the sane, but his peculiar

amaurosis prevents the alienist from seeing this. Similarly, logicians suffer from an occupation blindness which is accountable for many of their beliefs, amongst others for the belief that a proposition constructed with any other verb than the verb 'to be' is not a proposition. No one in any other walk of life has even a momentary difficulty in recognising that *Mary had a little lamb* is as much a proposition, and as true and complete a proposition, as *Mary is quite contrary*. Every one but a logician can construct the one and argue with and about it as easily as the other. Every one but a logician knows that propositions constructed on the first of these models are used much more often in statement and argument than propositions constructed on the second. Nay, the extraordinary thing is that logicians themselves, in their very arguments based on the assumption that the second model is the only possible form of proposition, employ a copious abundance of the other propositions whose existence they deny. Logicians have no difficulty in seeing that there are other disorders of conduct than getting drunk and assaulting the police, and alienists have no difficulty in seeing that there are other propositions than those constructed with the verb 'to be'. The blindness is strictly limited to those of a certain occupation.

Its blindness to the existence of the forms of the vast majority of propositions is only one instance of the occupation amaurosis of the logician. He assures us that there is only one mode of reasoning, and that this mode is subject to certain inexorable rules, breach of any one of which vitiates the reasoning and leads inevitably to fallacy. Well, I have given in the *New Logic* innumerable instances of other modes of reasoning, which do not conform to the logical type, and are not syllogisms. No logician has ventured to deny that these are valid modes of reasoning, or to assert that they are syllogisms; but no logician has taken any notice of them, and I shall be very much surprised if the next edition of any text-book makes any reference to them. I have given an instance of an argument that breaks seven of the eight rules of the syllogism, and yet is perfectly valid, and no critic has ventured to dispute the validity of the argument; but still every logician teaches that the syllogism is the only form of argument. His peculiar amaurosis prevents him from seeing the others. There is not one doctrine of logic that I have not proved to be false by the production of unanswerable instances to the contrary, and no logician has ventured to dispute any one of these contrary instances; but no logician has modified any doctrine of logic.

When Miss Jones says that my analysis of the proposition All men (subject) are (ratio) mortal (object) is not an alternative to the accepted analysis All men (subject) are (copula) mortal (predicate), she is no doubt right. I should not put this particular proposition in this form, which, as I have already said, is ambiguous and confusing. But there are plenty of cases in which the verb 'to

be' may be legitimately used in the construction of a proposition. *The weather is fine* is such a proposition. I do not deny that *S is P* is a form of proposition, or that it may legitimately be used when it is appropriate. What I deny is first, that it is the universal and only form of all propositions, and second, that it is legitimate to use it when it is ambiguous. My view is that *S is P* is a species of which *S : P* is the genus. *S : P* is the common form of all propositions, and *S is P* is a particular case of *S : P*. *S is P* predicates a relation between *S* and *P*, but does not predicate the only possible relation between them. There are innumerable others—*S* is equal or unequal to *P*, *S* is before or after *P*, *S* beat *P*, killed him, cut him into bits, boiled him, ate him, was poisoned by him, vomited part of him, and died of the rest of him. All these are propositions. Every one of them can be disputed and argued about. Every one can be reduced to *S : P*: none of them can be reduced to *S is P*. I do not expect logicians to admit this. They are precluded by their peculiar amaurosis from recognising it, but to every one but a logician it is as plain as a pikestaff.

I do not therefore plead guilty to Miss Jones's indictment that I 'have not taken into account the very important difference between the relative type and the non-relative *S is P* type of proposition,' for I hold that the proposition always does and must express a relation, and therefore I deny altogether that there is such a thing as a non-relative type of proposition. The only propositions that do not on the face of them express relations are those made with intransitive verbs, such as *Fire burns*, *Trees grow*, *Birds fly*, *The sun rises*, and so forth. In these, as I have been at pains to explain in *A New Logic*, the relation is obscured by the expression, but the relation is there, and can easily be displayed. It is because I deny the existence of non-relative categoricals, not because I have neglected the propositions that are called non-relative, that non-relatives are not treated of in *A New Logic*.

Miss Jones asks me what general account can be given of Denial, of the import of negative propositions, on my view. She does not see that I give any general account of such propositions. I think I do. Chapter xi. opens with the statement that denial is denial of a relation, just as affirmation is affirmation of a relation, and in this and the following chapter I go on to discuss the different ways in which a relation may be denied. I discuss denial by negative ratio, denial by negative terms, the simple negative, the privative negative, the obverse, the exceptive negative, the exclusive negative, the infinite negative, significant denial, denial of quantities, denial of qualities, and in place of the single square of opposition of Traditional Logic, I give eight squares of opposition applicable to different quantities. I do not know what more general account of denial than this could be given, but if Miss Jones will indicate in what respect it is defective, I shall be happy to supply the omission.

It would be churlish to conclude these answers to Miss Constance Jones's questions without expressing to her my very sincere gratitude for the pains she has taken, and the time she has given up, out of a very busy life, to acquaint herself with views that I am sure must have been distasteful to her. She is the first person to take the New Logic seriously. She admits that I do direct attention to important defects of the Traditional Logic. She realises that my book is one to be reckoned with. This is a very unwonted attitude, and a wonderfully liberal-minded attitude for a logician to take. Hitherto, logicians have ignored the New Logic as completely as practical reasoners ignore them and all their works. Whoever heard in Parliament, in a Court of Law, on 'Change, at a company's meeting, in the pulpit, at a scientific society, or in any argumentative dissertation on any subject whatever, a syllogistic argument? Whoever heard any reasoner attempt to justify his position or assail that of his opponent by any of the devices of Traditional Logic? Whoever heard of a logician even in his most argumentative mood—even when he is reasoning about the syllogism itself—make use of the syllogism? In every other walk of life, we defer to the expert on matters within his own speciality, but whoever referred to a logician, or quoted a book on logic, to show that his arguments were valid?

Miss Jones is the first logician to recognise 'the narrow scope of syllogistic reasoning, the loss both to logic and to life which results from the frequent failure of logicians to exhibit their Science in vital relation to thought and conduct'. All honour to her, first for discerning this, and second for having the courage to make the admission. It is true that here and there a logician has timidly expressed a half-hearted doubt whether the syllogism does, after all, possess all the powers claimed for it, but no one, except in the New Logic, has ventured to put forward any other; no one has shown that any rule of the syllogism may be violated and yet the argument may be perfectly sound; no one has gathered together and exposed all the absurdities, futilities, and falsities of the Logic of Tradition. It may be that the tradition may live on in a little coterie, and that Logic will survive, as Judicial Astrology has survived, in spite of reason and in spite of ridicule, in spite of its proved falsity in theory and its proved uselessness in practice; it may be that a future historian may too hastily assume with respect to Traditional Logic, as I assumed with respect to Judicial Astrology, that it is utterly dead, and owns not a single surviving practitioner; and he may be astonished in his researches on the one subject, as I have been astonished in mine on the other, to find that, after all, there exists here and there a simple-minded fanatic, impervious alike to reason and ridicule, who accepts reverently any absurdity if only its author lived a long time ago. Logicians make a great pother about the stirring of the dry bones of Logic, and point to innumerable recent treatises on the subject as evidence that it is

still alive ; but so may a corpse be said to be alive when it supports life in countless lower organisms. The 'advances' and 'improvements' and 'discoveries' in Logic are, like Hamilton's quantification of the predicate, merely trifling variants of the old doctrines, and have as good a title to be considered revolutionary advances in the science of Logic as the substitution of wooden tallies for the abacus was a revolutionary advance in the science of mathematics. The few logicians who are acquainted with the New Logic look upon it much as theologians in the middle of the last century looked upon Darwinism, or as theologians before that regarded the works of Hume. They are horrified and alarmed and scandalised. They cry : This man blasphemeth ! They refuse to examine it, lest their convictions should be unsettled. But they are in no danger of such a catastrophe ; they have a sufficient safeguard in their occupation amaurosis. Few indeed of them have the candour, the openness of mind, or the courage of Miss Constance Jones.

CHARLES A. MERCIER.

PROF. ROSS ON ARISTOTLE'S SELF-REFUTATION.

WHILE I am of course much obliged to Prof. G. R. T. Ross for the great pains he has taken¹ to set me right about Aristotle's apparent abandonment of the formal doctrine of opposition,² I have not been enabled so far to perceive the relevance of his reply to my difficulties, and as I do not know whether to ascribe this to my obtuseness or his obscurity and think that others may find themselves in a similar case, I venture to discuss the matter further.

It is gratifying to note, to begin with, that Prof. Ross does not appear to contest the essence of my case, *viz.* that when Aristotle comes to argue concretely (in the *Ethics*, etc.) he entirely ignores his formal logical doctrine that A and O propositions cannot be true together and maintains (as it seems to me, *rightly*) that there is nothing in the nature of a general principle that guarantees the validity of its application to any particular case. Prof. Ross asserts indeed that I am wrong in equating truth *ἀπλῶς* with truth *καθόλου*, but he does not attempt to show this. The only relevant passage he quotes from Aristotle (p. 397) supports me and goes to show that the latter also identified them. And even if he had not and if his argument did not lead irresistibly to the conclusion I ascribe to him, it would still be an open question whether in point of fact a distinction can be sustained between truths which are true in the abstract and truths which are true 'universally'. Prof. Ross therefore would have to establish the existence of the latter, and to show how his alleged 'universal' truths can escape from 'fallacies of Accident' so soon as any one tries to apply them. This again he makes no attempt to do. Nor does he attempt to throw any light on the incompatibilities between Aristotle's account of the 'fallacies' of *Accident* and *Secundum Quid* and his account of the Syllogism; he confines his strictures entirely to the passage I quoted from the *Topics*, ii. 11, as possibly containing the germs of the doctrine subsequently advocated in the *Ethics*. Now I am quite willing to learn that I was mistaken, and that the passage in the *Topics* does not really elucidate the subsequent developments, because its withdrawal would yet leave my case intact; but I do not find that Prof. Ross's exegesis of it is either convincing or even relevant to the question in dispute.

(1) I must point out that it was in the *ἐνστάσεις*, and not in the main contention, that I found the significant anticipations of

¹ In No. 91.

² Cf. No. 89.

Aristotle's later developments. But I did not dispute that they were still rejected. The mere fact that they are called *ἐνοτάσεις* renders it probable that at the time of writing Aristotle thought they could be refuted; but apparently he changed his mind about this.

(2) I had not to contend that Aristotle was conscious of the bearing of his discussion in the *Topics* on his formal doctrine of opposition; it is enough that a relation may be shown to exist between them. For it is clear that one cannot discuss changes in the valuation, and even falsifications, of general laws in consequence of the modifications necessitated by their application to cases, without raising the question of the relation of exceptions to rules. The fact therefore remains that if a rule fails to apply to a case, it can no longer be considered literally universal, and if it fails to apply for a reason inherent in the very act of application, no rule can any longer be regarded as indubitably applicable to every case.

(3) I cannot accept Prof. Ross's correction of my statement that "if a thing is true in some respect it may also be so in general".¹ It would perhaps have been more exact (though clumsier) to translate *ἐνδέχεται* by 'it is possible that it is' than by 'may be,' but it is essential to bring out the implied *contingency*, which Prof. Ross's translation obliterates. Aristotle could not mean that if A has the quality B under special circumstances, it *must* have it *ἀπλῶς*, but only that it *may*. On Prof. Ross's interpretation Aristotle is asserting either the triviality that if A in a special situation possesses the quality B it is capable of possessing it, or else the absurdity that if it possesses B in this situation it possesses it necessarily. But this is clearly false, and incompatible with the admissions that a rule which is true *ἀπλῶς* may become false under special circumstances, and that what is true under special circumstances may not be so in general. It clearly does not follow that because the water in a kettle boils now it boils always, or that because whisky does not intoxicate after a snake bite it never does so.

(4) Prof. Ross thinks that "the point to be established and the objections refuted in this passage are practically verbal" (p. 397), but he will hardly deny that in it Aristotle recognises a distinction between assertions which are true *κατὰ πρόθεσιν* (but false *ἀπλῶς*) and those which are true *ἀπλῶς*, though he minimises its importance and tries to disagree with me about truth *ἀπλῶς*. What he does not appear to have observed is that if truth *ἀπλῶς* is taken to mean 'absolutely' or 'unconditionally' and to exclude falsity *κατὰ πρόθεσιν*, the occurrence of such truth is just what I dispute and he has to establish, while if it is taken to admit that anything *ἀπλῶς* true may yet be *κατὰ συμβεβηκός* false, that is the very interpretation I am seeking to establish, and showing to have

¹ No. 89, p. 3.

been adopted by Aristotle himself in the *Ethics*. The mere interpretation is however less important than the consequence that inasmuch as all actual cases of 'truth,' whatever the principles they appeal to, are individual and fully equipped with a specific context, *i.e.* consist of assertions made under special circumstances, and as the abstract formula or rule is merely a potential assertion (or 'propositional function' in Mr. Russell's terminology), no principle or law can be presumed *a priori* to be valid in any particular application. Now this seems to me to be a conclusion not only of the greatest speculative interest, because it sweeps away the whole notion of 'a *priori* proof,' but also of great historical interest, in view of the Aristotelian authority I have quoted for it.

For these reasons then I entirely fail to see how Prof. Ross can think that he has established his charge against me of 'miscomprehending' Aristotle. On the other hand he can easily be shown to have 'miscomprehended' me, and also to have committed himself to a number of indefensible assertions. And as he seems to be no less interested in this part of his paper than in Aristotelian exegesis, it will not be inappropriate to add a few comments on it also.

(1) I will remark first on the extreme precariousness of his belief in the existence of 'unconditional' truth and the logical weakness of his trust in mathematical 'self-evidence'.

(a) By 'mathematics' he means presumably *pure* mathematics to the exclusion of *applied*, and hopes by this naïve device to rule out the searching question 'What is the bearing of applied, on the truth of pure, mathematics?' and the dangerous suggestion that in the last resort the latter depend on the former for their meaning. But as the reasons for the preference accorded to Euclidean geometry and common arithmetic over other equally conceivable mathematical systems are manifestly to be found in the exigencies of application, this assumption of the independence of pure mathematics is clearly a signal example of *ignoratio elenchi*.

(b) It is further probable that by 'mathematics' Prof. Ross must mean common arithmetic to the exclusion of geometry, because the conditions on which the 'truth' of Euclidean geometry depends have now been rendered fairly clear even to the non-mathematical. But in the case of arithmetic also it is not difficult to detect the hypotheses which 'condition' the number-system.

(c) Lastly I would remind Prof. Ross that no one has a right to rely on so psychological a criterion as 'self-evidence,' without at least attempting to distinguish between true and false self-evidence and to discriminate his 'sane' intuitions from those of lunatics who are often far more certain of the strangest delusions than a reasonable man is of anything.

On the whole, therefore, I am tempted to reply to Prof. Ross's confession that he knows no *better* example of unconditional truth than mathematics that I can hardly imagine a *worse*.

(2) It may here be noted that Prof. Ross is quite mistaken in his analysis of the strange case of the tangent to which I referred. It is not true that the geometer has '*overlooked*' the tangent, when he declared that *every* line 'cuts' the circle in two points. In the sense which analytic geometry finds it convenient to give to 'cuts,' the tangent does 'cut' the circle. And this sense was developed long after the trigonometrical properties of the tangent were known. It involved an analogical extension of the original sense of cutting which is mathematically justifiable in the context in which it occurs. There is therefore neither negligence nor mystery about it, nor does it exemplify an inexact use of assertions "that are true only in the majority of cases" (p. 400). But what it does show is that no mathematical proposition can be unconditionally true; for there can be no absolute guarantee that its terms will not have their meaning altered and extended in the progress of mathematics, until their original meaning becomes paradoxical or false. And even where it does not, only one who believed that all relations were wholly rigid and 'external' could deny that the progress of any science must always modify even its old truths, by including them in a larger and more intelligible system, by providing them with further connexions, and by improving their formulation. It would seem, therefore, that Prof. Ross was rather hasty in declaring himself satisfied with the 'self-evidence' of mathematics as attesting its 'unconditional' truth.

(3) Prof. Ross is himself finally seized with doubts as to whether he has "comprehended the real nature of the new non-formal Logic," but excuses himself on the ground that, if he is wrong, I am to blame for describing "the nature of real thought only negatively, *i.e.* as being non-syllogistic" (p. 401). I can however assure him that this last idea also is part of his 'miscomprehension'. So is his supposition that I would "admit that the syllogism *intends* to employ major premisses which are unconditional and infallibly determine the particulars" (p. 399). He must have read my discussion of the syllogism to singularly little purpose, if he has really gathered either of these ideas from it, and not from his preconceptions about what a humanist logic must be like. I should never dream of arguing that 'the syllogism' needs unconditional premisses, though I am of course aware that the traditional interpretations have erroneously assumed this. Nor is there anything I have urged more strongly than that there is *no* escape from the fatal dilemma 'either a tautology or a *petitio*,' so long as the premisses of the syllogism are interpreted as 'unconditional,' *i.e.* as indisputable truths, and that to give any meaning to the syllogistic form the real reasoning which employs it *must* be understood as an *experiment*, and as relative to a doubt in some form or other (*cf. Formal Logic*, pp. 210-211). And this appears to me to be a *positive* result of great importance, although I can quite see how very unwelcome it must be to all the apriorist theories of Knowledge which it renders untenable.

(4) It is probably because he has so radically misunderstood my criticism of syllogistic theory that Prof. Ross thinks my own theory involves "the extraordinary doctrine that every determination of a particular subject is a condition of every assertion that can be made about it, *e.g.* that X's red hair was a condition of his weighing twelve stones!" All that is involved in it is, not that it (necessarily) *is*, but that it *may be* (for certain purposes). And that this contention is sound appears even from his own illustration. For if Prof. Ross's friend was like Esau and had plenty of red hair, he might easily win a bet that he weighed less than twelve stones by shaving all over!

(5) At the top of page 400 Prof. Ross makes the common mistake of supposing that pragmatists must relapse into an absolutist sense of 'true' and 'false,' when he attributes to me a belief "that it is unconditionally true that all Formal Logic is nonsense". But I can assure him that I hold this subject to correction and am quite willing, and even anxious, to listen to a defence of Formal Logic that will make sense of it, from him or any one else. And, if he will reflect for an instant, he will surely recognise (a) that it is quite unnecessary for me to burden myself with unconditional truths and quite enough to show that any truth I need holds so far, because no pragmatist ever wishes to assume that his formulations of truth are unimprovable; also (b) that in this case I have *actually stated the condition* which makes Formal Logic nonsense, and cannot therefore wish to believe that it is unconditionally nonsense. The condition is that Formal Logic expressly abstracts from meaning (*Formal Logic*, chap. xxiv. § 5-6); so long as any Logic does this and defines itself thereby, it will be nonsense, voluntarily and of its own accord, because it insists on being so. But it does not of course follow that there will always be logics which make this abstraction and conform to this definition, though I do not myself expect to see the last of them in my time. Nor can there be any guarantee that the term Formal Logic will not hereafter be used in a variety of other senses; it is unlikely to escape the common fate of philosophic technicalities, that no sooner has one philosopher made an attempt to render them precise than another comes and uses them in a different sense. I am painfully aware therefore that it is always possible that in the next philosophic treatise one takes up 'black' may mean 'white' and 'white' 'black' (*cf.* the history of 'subjective' and 'objective'), and one always therefore runs the risk of thinking it greater nonsense than it actually is. But at present I am not aware of any reason for thinking that such vagaries are conditioned by the colour of an author's hair (*cf.* p. 400); the point might well be investigated, though I do not suppose it has been. I should not select it as a subject of inquiry myself, because I happen to know of so many others which seem to me far more promising, and therefore prefer to run the risk of not discovering whatever

truths may lie in this direction ; only the subject of bias and its causes has been so little investigated that it seems unnecessary to assert, dogmatically and *a priori*, that there can be no correlation between red-hairedness and the holding of certain doctrines. But if Prof. Ross would like to attempt this inquiry, and thinks it as attractive and useful as any other he can think of, I am the last person to stand in his way.

(6) In conclusion I am glad to note that Prof. Ross has despaired of finding "a formal difference between the true and the false" (p. 401). Let us hope that this will arouse him to the necessity of finding a real one !

F. C. S. SCHILLER.

DR. MERCIER AND THE LOGICIANS.

INTO a contest with a logician I enter under a great disadvantage, for my ignorance, to which Mr. Shelton refers in such courteous terms, of the ways of traditional Logic, prevents me from following his arguments and from seeing their applicability. He says that when Dr. Schiller calls Logic a game, he has a definite meaning, and knows what he means, but when I say the same thing the assertion is foolish and meaningless. I do not put myself into competition with Dr. Schiller, and gratefully express my indebtedness to him for the suggestion that Logic is a game; but so far from having no meaning myself when I endorse his assertion, I explained in my last contribution to this discussion exactly what I do mean, and I will presently explain it again. In proof that I mean nothing when I say that traditional Logic is a game Mr. Shelton quotes three of my definitions of the terms used in my *New Logic*, and this is one instance of the serious disability under which I lie in not having had a logical training; for, for want of it, I cannot for the life of me understand how my definitions of the terms I use in the *New Logic* render meaningless my assertion that the old Logic is a game.

Mr. Shelton counters my assertion that inversion is invalid, and the old Logic useless, by the assertion that the style and manner of advertisement of my *New Logic* are quackery. This is indeed controversy, but to the non-logical mind it is not argument. I have not seen the advertisement to which Mr. Shelton refers, but I have every confidence in Mr. Heinemann, and I shall not believe that he has descended to quackery until I have some evidence; but granting for the sake of argument that my excellent publisher has advertised my book in an unseemly manner, I cannot see (not being a logician) how that renders inversion a valid inference or traditional Logic of any use.

The proof that Dr. Bosanquet is not playing a game of spoof is, according to Mr. Shelton, that my profession are (*sic*) spoofing the public and thereby putting public money in their pockets. Here again my deplorable ignorance of traditional logic prevents me from seeing any connexion between the premisses and the conclusion. Assuming that this is a syllogism, and according to the old Logic the syllogism is the only process of reasoning, I ask Mr. Shelton to be kind enough to point out the figure and the mood to which this syllogism belongs. I have a shrewd suspicion that his middle is undistributed or ambiguous, or that there is some other

vital fault in the argument; but as neither he nor any other logician ever puts his argument into syllogistic form, although, I repeat, the syllogism is the only known form of reasoning, it is impossible to say whether his middle is distributed at least once or not. Perhaps, however, this is an immediate inference, or an inference by complex conception. It would be much fairer to a critic if Mr. Shelton and other logicians would put in the margin or in brackets the exact figure and mood of the syllogisms they employ, or the particular immediate inference, as converse, obverse, contrapositive, or inverse, that they are using. It is scarcely fair to expect an ignoramus like myself to analyse their arguments without this assistance; and an accomplished logician like Mr. Shelton could surely do it, if I may be permitted to use the expression, on his head. I have puzzled for a week over the arguments in Mr. Shelton's paper, and I cannot bring them under Barbara, or Celarent, or any other of the recognised moods; yet some mood they must exemplify, for is not the syllogism the only mode of reasoning?

Mr. Shelton advises me to say that I do not agree with Dr. Bosanquet and to state my reasons. The advice is kindly, but it is uncalled for. I have already, in my *New Logic*, stated my disagreement with such of Dr. Bosanquet's statements as I can understand, and have given my reasons; but, not being a logician, I cannot say whether I agree or disagree with statements that I do not understand. To do so would be to take part in the game of spoof. Mr. Shelton admits that in Logic there is a considerable element of spoof, but he denies that the epithet applies to Dr. Bosanquet's contributions. I am not, however, without support for what I say. A writer in the *Quarterly* says of Dr. Bosanquet's contribution to Logic, 'logic in the ordinary sense of the word it certainly is not'. To say of what pretends to be logic that it is not logic comes very near to calling it spoof, and the writer who says this is Mr. Shelton.

Once more I will try to make clear my indictment against the old Logic. I say that Logic, as a science, should investigate, describe, and explain all the modes in which we reason; and as an art, should show how these reasoning processes are to be carried out in practice; and a very important subsidiary function of Logic is to inculcate clearness and precision of statement. My grievance against traditional Logic is that it has discovered but a very few, and these the least important and the seldomest used, of the modes by which we reason and argue; that as to these it is mostly wrong; that logicians themselves do not employ these modes in reasoning or in argument; that the study of traditional logic does not conduce to cogency of argument, and in support of this statement I adduce the example of Mr. Shelton; and that neither Logic nor its professors pay any attention at all to clearness or precision of statement, and in support of this I adduce the ex-

ample of Dr. Bosanquet. If we may judge the tree by its fruits, and traditional Logic by the achievements of its professors, its tendency is to deprive them of the faculty of stating their ideas intelligibly, and of conducting their arguments logically. My claim for the New Logic is that it cultivates the whole extensive field of Logic, including the tiny corner tilled to such little purpose by traditional Logic, and explains all the reasoning processes that are actually in use.

The reason I call traditional Logic a game—my meaning when I call it a game,—is this :—when we do a thing in order to achieve a useful result, in order to make something that shall be of use when made, we are certainly not playing a game ; but when we do a thing for the fun of doing it, or to display our skill in doing it, or for our interest in doing it, regardless of the usefulness or otherwise of the product, then we are playing a game. The test by which we may know whether or not we are playing a game lies in the question, Are we doing it for its utility, or merely for our interest in doing it and to display our skill ? I say that whoever performs the processes of traditional Logic does so for the sake of doing them, and not for any useful purpose that results from doing them ; and in proof of what I say I point to the fact that no practical reasoner in real life ever uses any of the processes of traditional Logic, and that even logicians themselves never use any one of the modes of reasoning that they teach. Is it conceivable that this discussion on the validity of inversion could ever have taken place if inversion were in common use by practical reasoners to arrive at results ? Is it not manifest that whoever uses inversion uses it for the intrinsic interest of using it, and not for any end to be attained by using it ? He who constructs a syllogism according to rule, refers it to its proper figure and mood, sees that its middle is distributed at least once, and is not ambiguous, that both its premisses are not particular, and so forth, is not in the least concerned about the conclusion he reaches, except to see that it conforms to rule. He does not go through his labours to discover that Socrates is mortal, or that Iron is a useful metal, or that Birds are not viviparous. He does it for the sake of doing it, and to show that he can do a difficult thing without making a mistake, like the juggler who keeps half-a-dozen knives in the air at once, or the perpetrator of a jig-saw puzzle. This, I say, is playing a game, pure and simple. On the other hand, he who executes the processes described in my *New Logic* does them, not for the sake of doing them, but for the results to be obtained by means of them, and this is why the New Logic is not a game. By the old Logic we arrive at the conclusions that Socrates is mortal, that Iron is a useful metal, and so forth : by the New Logic we solve the problems, Where is my hat ? What is the best manure for turnips ? Is this investment safe ? Who stole the bacon ? If the syllogism is the sole mode of reasoning, why do logicians never use it ? If a

logician cannot argue, what is the use of Logic? When we attempt to answer these questions by reasoning processes we do so not to exercise and exhibit our skill in doing them, but to attain by their means a useful result. We want the conclusion for its own value in our lives, and not merely as a bit of a jig-saw puzzle, of no use except to fit into its place, and to exercise our skill in fitting it. This is the difference between the game of traditional Logic and the practical art of the New Logic. Mr. Shelton says this explanation is foolish and meaningless. It may be so—to a logician.

CHARLES A. MERCIER.

Postscript.—In his *Quarterly Review* article Mr. Shelton formally surrenders the universality of the syllogism—‘It is incorrect,’ he says ‘to say, that we always or necessarily reason in syllogisms.’ So far so good. But does Mr. Shelton suppose that, now he has capitulated at Ulm, he can save Vienna? He tries to secure the honours of war by asserting ‘It is correct to say that we can always, if we wish, express valid reasoning syllogistically’. Can we? Then perhaps Mr. Shelton will express the argument *à fortiori* syllogistically.

C. A. M.

DR. MERCIER AND FORMAL LOGIC.

I HAVE no desire to intervene in the quarrel Mr. Shelton has picked with Dr. Mercier,¹ though he seems to me to have quite failed to appreciate the latter's banter and to have made some very damaging admissions which go far to justify it; for I am sure Dr. Mercier is well able to take care of himself. But I should like to thank Mr. Shelton for stating so correctly and clearly the ground of my own objection of Formal Logic, and at the same time to dispute his denial to Dr. Mercier of the right to denounce Formal Logic as a silly game.

Mr. Shelton is quite right in thinking that when I call Formal Logic a game, the meaning of the charge is quite specific, and also that it must mean something different to Dr. Mercier and to me, because from my standpoint Dr. Mercier's Logic is also Formal, and also a 'game'. But it by no means follows that Dr. Mercier has no right to complain of the traditional 'logic'. Surely he is fully entitled to object that the traditional logic is a *bad* game and that his 'new' logic makes a better one, and to make out a case for his contention. Indeed on the whole I am not indisposed (provisionally) to endorse his claim. For my own investigations of traditional logic lead irresistibly to the conclusion that it is essentially an equivocation between psychology and verballity; and that nearly all of its doctrines may be construed in either way. It has in consequence always an escape from criticism. If its psychologism is attacked, it can always point out that the verbal meaning is not a fact in any one's mind; if its verbalism is condemned, it can always claim to refer to actual thinking and deplore the deficiencies and ambiguities of language. Consequently the only way to force it to render an account of itself is to stop up *both* its ears, and to attack its verbalism and its psychologism simultaneously.

Now this is, I take it, the interest of the present situation. The traditional Formal Logic can only escape from my criticism by becoming wholly verbal and confessing that its so-called 'logical analysis' is neither psychological nor scientific, and deals merely with the 'dictionary-meanings' of words; but if it does this, it rushes straight into the jaws of Dr. Mercier, who (very reasonably) wants to know why, if so, it has chosen to recognise a few only of the familiar forms and usages of speech and of the inferences they seem to warrant. To have concretely and fully illus-

¹ In No. 91.

trated this side of the deadly dilemma in which the traditional 'logic' is caught seems to me a great service which Dr. Mercier has done to logic, and one quite comparable with that of the symbolic logicians who are trying to render traditional logic consistent in their way, by asking why, if logic believes in *fixing* meanings, it does not do this thoroughly and is unwilling to become wholly symbolic.

The different sorts of logical reformers, therefore, however much they may differ among themselves, can all agree that the traditional logic is indefensible and a disgrace to science, and support each other's questions. The humanists ask 'why, if you profess to deal with actual thinking, do you ignore the actual meaning of thinkers?' the symbolists ask 'why, if you aim at exactness, do you refuse to use symbols only?' and Dr. Mercier asks 'why, if you aim at analysing the use of language, do you restrict yourselves to a few phrases only?' And all three can agree that in view of the actual condition of 'logic' all these questions are justifiable—and unanswerable.

F. C. S. SCHILLER.

VI.—CRITICAL NOTICES.

A Manual of Psychology. By G. F. STOUT, M.A., LL.D., F.B.A.,
Professor of Logic and Metaphysics in St. Andrews University.
Third edition, revised and enlarged. London, 1913,
8vo. Pp. xvii, 769.

EVER since its first appearance in 1898, Dr. Stout's *Manual* has been, I suppose, the text-book of psychology most widely used in the Universities of this country; and teachers of the subject would generally admit that, subject to one important proviso, it has been by far the best text-book to put into students' hands. The proviso was that students had sufficient intelligence to be able to make use of it. For it was, one must confess, a mighty difficult book, and apt to leave the weaker sort agape.

The first obvious comment to make upon this new edition is that it is a far better text-book. Many of the chapters have been rewritten: most of them have been more or less altered; and nearly all the changes make for simplicity and comprehensibility. Moreover, two new and much-needed chapters have been added. Probably many have felt that there were three topics which, though not entirely neglected in the earlier editions of the *Manual*, did not receive the formal recognition that they deserve,—namely, Attention, Desire, and Instinct. Desire may still account herself somewhat injured; but the chapters on Attention and Instinct are full and admirably lucid. In consequence of these additions something, no doubt, had to be sacrificed, and so the chapter on Faculty Psychology and Associationism has gone. I lament its disappearance: associationism commends itself so easily at first to every true Briton that Dr. Stout's criticism of it had more than merely historical applicability. Would that he had retained it, and persuaded the publishers to divide the bulky volume into two again!

So much for the utility and convenience of the new edition considered merely as a text-book. But many of the alterations have great intrinsic importance. Most fundamental are those which concern immediate experience and perception of the external world, but before discussing them I will mention a few other notable changes.

In the Introduction, chapter i., Dr. Stout objects (and surely with justice) to the saying that "Psychology is not the science of mind, but only of mental processes or states". "The only possible point

of departure lies in the definition of a mind as a conscious individual," and no one "can deal with mental processes or states without reference to their being the processes or states of some conscious individual, some "I" or "self".

In chapter ii., apart from changes necessitated by the doctrine of "immediate experience," there need be noted only the introduction of new sections on pre-scientific psychology, which should save the beginner from the depressing feeling that he has wandered into regions hitherto quite strange to him.

Chapter iii., on Body and Mind, has been entirely re-written and nearly doubled in length. The revision of the strictly physiological part of the chapter results in pure gain to the reader; in the more speculative part, however, Dr. Stout has been too Quixotic. He has evidently been greatly impressed by Dr. McDougall's advocacy of interactionism, and though he tells us in a note to the Preface that personally he still adheres to Parallelism, he has set out the objections to the latter theory in such fullness and has so roundly called it "brutally empirical" and other such cruel names, that the ingenuous student will never think twice of it. He admits finally that the difficulties can be solved only by "bold metaphysical speculation"; but whereas in the second edition he gave us a taste of this, he has now withdrawn the ontological discussion, as those who recall his article in *MIND*, vol. xx., would expect, and he ends rather abruptly by saying that it ought to make "no essential difference" to us as psychologists which of the two views we accept. That seems to me to be strictly true; and I conclude that the proper place for the discussion is in a Manual of Metaphysics, not in a Manual of Psychology.

The *Groundwork* prepared us for a renewed defection from the ordinary threefold division of conscious processes, but in fact Dr. Stout is unexpectedly orthodox. He now heads the discussion, "Ultimate modes of the relation of the conscious subject to its object," and the phrase is better than the previous "Ultimate modes of being conscious". He then tells us at once that the fundamental modes of the relation are three—cognitive, active, and affective. The cognitive attitude involves either judgment or doubt or mere supposition—though, it is added, doubt and supposition presuppose and involve judgment (belief). The feeling attitude is still so described as to exclude the possibility of 'neutral' feelings, but the argument against their occurrence convinces me as little as ever, and would, I venture to suggest, convince no one who is at once introspective and phlegmatic. The conative attitude is kept more distinct from that of feeling than in the *Groundwork*, though, of course, their intimate connexion with one another is emphasised. But these are all 'modes' of the general relation of subject to object, and Dr. Stout proposes to call that relation itself 'Simple Apprehension'. I cannot think this use of the name convenient, nor does Dr. Stout's discussion of the

matter seem to me altogether clear. It might be argued, he says, that Simple Apprehension falls under Cognition, and *if* anything actual corresponds to the term as ordinarily used, that is surely where it would fall. But clearly the general relation of subject and object cannot fall under one of its own modes. Dr. Stout, however, instead of repelling the suggestion by merely emphasising his use of the name, argues that Simple Apprehension cannot fall under cognition because cognition always involves judgment, doubt, or supposition. But what place is there for this distinction in the perceptions of, say, an infant or a cat? Further, Dr. Stout illustrates the distinction between Simple Apprehension and Cognition thus: "Let the object before the mind be what is meant by the words 'that the moon is made of green cheese' or 'the moon's being made of green cheese'. Simple Apprehension requires only that the meaning of the words be understood. But besides this there is always belief, disbelief, doubt, or supposal." Here he may seem to be using the term "Simple Apprehension" more nearly in its traditional sense. But surely understanding the meaning of the words is a very different thing from the *general* relation of subject to object; a word can be understood only because it has become a signal for judgments. What is meant, I take it, is that we may abstract from concrete attitudes of judgment, etc., the mere having an object before the mind, and call this apprehension simply, but that it is an abstraction and we never do apprehend an object and nothing more. True, but the difficulty about perception (and imaging) remains. Moreover, simple apprehension is to be the name for the general relation of which feeling and conation, as well as cognition, are special modes. But is feeling always an attitude towards an object at all? And when it is, does it not presuppose cognition of the object? And if so, will not the simple apprehension be relative primarily to cognition and only indirectly to feeling? I feel sure that my difficulties are due to misunderstanding, but the exposition is not very clear.

The new chapter on Attention is excellent. It includes among other things the discussion of Conative Unity and Continuity, formerly in another chapter. The lucid treatment of marginal awareness and of subconscious sensations is specially noteworthy.

In the chapter on Primary Laws of Mental Process the old sections on Relativity and on General Unity and Continuity have been omitted, whilst the third and fourth sections have been transferred, as just mentioned. Some changes of terminology have been introduced to fit in with the new exposition of the primary meaning of sensations; thus what was called "primary meaning" in the old edition is now called "primarily acquired meaning," and what was called "acquired meaning" is now called "reproduced meaning". New sections have been added under the titles "Retention involves Retention of Presentations" and "Explicit ideas which are not free," and the discussion of motor

association has been much altered and extended. Several points in this chapter will be mentioned later on; it might be noted here, however, that to speak of retention either of presentations or of objects that are not presentations is misleading and obscures the superiority of the doctrine of dispositions over the old conception of memory as a store-house. But on the whole this is one of the chapters that have gained most by re-writing.

Passing on to the second Book, on Sensation, and leaving aside for the moment the chapter on General Characteristics, we find the discussion of the Sensation-Reflex much (I think over-much) abbreviated, and § 1 of the old chapter iii. greatly developed and improved (as § 2 of chap. ii.) under the heading "Perceptual Value of Sense-experience". The treatment of the various kinds of sensations has been brought up to date, the most important alterations, of course, being due to the researches of Dr. Head and his collaborators.

Book iii., part i., on "Perceptual process in general" opens with the new chapter on Instinct, in which Dr. Stout develops the view which he put forward in the *British Journal of Psychology*. The genus of instinctive behaviour being that it rests on connate endowment, what differentiates it from other kinds of congenitally determined processes? The purely biological view of instinct fails to distinguish it from other kinds of vital adaptation. On Dr. Stout's view the differentia consists in this, that instinctive behaviour from the first involves "the co-operation of intelligent consciousness". Its guidance by complex and changing groups of sense-impressions, its outward manifestations in bodily attitude, its persistency with varied effort, and its modification by experience, all combine to show that it is attentive process and involves "an impulse which requires for its satisfaction the doing of something in the sense of achieving a certain perceptible result". Intelligence is involved from the first. What appears to be interest is observable from the first, and were there not originally attention and continuity of interest, how could those dispositions be formed which are necessary to learning by experience? Past experience, no doubt, "is a contributory factor in the first performance of all instinctive actions except the very earliest"; but even the very earliest, though of course they do not include clear prevision of the end, involve throughout an awareness of each moment of the process as transitional to something yet to be. An abstract does not do justice to this brilliant, and to my mind convincing, argumentation. On the other hand, I think that Dr. McDougall's view of the interrelation of instinctive process and emotion deserves fuller consideration than it receives. It is just touched on in one passage (p. 355), but the old chapter on Emotions, which except for some abbreviations is, like the chapter on pleasure-pain, practically unaltered, is not brought into any definite relation to the discussion of Instinct.

I turn now to the most important changes in this new edition,

which concern sensation and apprehension of the external world. In face of the criticisms brought to bear on his previous account of spatial perception and the like, Dr. Stout has reverted, as he said he would, to a position mainly the same as that which he defended in the *Analytic Psychology*; and whether his present exposition satisfies his critics or not, they must at any rate allow that it is far more clear of verbal ambiguities and far more easy to follow. But in the interests of psychology itself I wish that he had added a final chapter on the limits of psychology. What is commonly known in this country as the Oxford view of psychology—that it consists of unintelligent answers to unintelligible questions—is mainly the exaggerated expression of a belief that psychologists are forgetful or even unconscious of the presuppositions and limitations of their study; and this belief is not without occasional justification. No one is better able than Dr. Stout to dispel misconceptions that are rapidly becoming wearisome; and even as a text-book the *Manual* would be improved by a chapter that warned the student away from the dangerous booby-traps of uncritical 'Psychologismus'.

Dr. Stout's new formulation of his doctrine agrees with what he has already written in several scattered articles and papers, to some of which it will occasionally be necessary to refer. With regard to several difficulties that occurred to me I have had the advantage of some correspondence with Dr. Stout, of which I shall make use to elucidate points in his meaning that to me at any rate seemed uncertain.

The most striking point in the doctrine is, of course, that thought, with the categories of thought, is involved in all perception. Sensations perform a function which I may, perhaps, call notificant; they are mental, but they make us apprehend, or (if that phrase implies transition in time) they always mean or carry with them the thought of, objects which are not mental (or at any rate not my-mental); but they can perform this function only because of a necessity lying in the mind's own nature to think in certain ways. This activity of thought is stimulated and has its 'cue' given it by sensation, but it is not itself a sensory process, and even perception therefore is much more than sensory. I think that this has always been Dr. Stout's meaning, but he expresses it much more clearly than in previous editions of the *Manual*.

Having explained what is meant by the psychological or subjective point of view, he raises the question in what way psychology is concerned with objects, and so introduces us at once to the notion of "immediate experience". Whether one likes the name or not the meaning is clear. Psychology studies the states and acts of a conscious subject. These are all subjective in the sense that they are dependent on and parts of the life-history of an individual mind which lives through them; but in another sense

some of them are objective, being constituents of complex apprehended objects. Such objective immediate experiences are called Presentations, and it is necessary to bear in mind throughout that this term is no longer used in the sense given to it in previous editions of the *Manual*. There are three species of presentations, Sensations, Images, and an imageless, amorphous type found in trains of thought. The objects of a conscious subject, then, will be divided into those that are presentations, and those that do not depend for their being on their relation to that subject: the former are studied by psychology for their own sake; the latter are data of psychology in so far as reference to them is necessary in giving an account of immediate experiences.

But originally our awareness of objects that are not presentations is conditioned by presentations. Thus "in being aware of a pressure-sensation we also are cognisant of something which presses. . . . The apprehension of immediate experiences in the way of sensation carries with it the apprehension of objects which are not immediately experienced—objects which are thought of as having a being independently of what passes in our mind in the moment of our becoming cognisant of them." This point is emphasised again and again. "It is through sensation that we become in the first instance conversant with external objects and their qualities; and this takes place in such a way that the apprehension of resemblances, differences, successions and co-existences in the external world is essentially conditioned by the apprehension of resemblances, differences, successions and coexistences of sensations." "The mind is dependent on immediate experiences for the cues which at any moment determine the direction of thought to objects which are not immediate experiences." "The simplest datum of sense-perception from which the cognition of an external world can develop consists, not merely in a sensuous presentation, but in a sensuous presentation apprehended as conditioned by something other than itself." Hence "we can never have absolutely pure sensation, sensation absolutely devoid of meaning either original or acquired".

Perception then is of a complex object, which need not be and is not usually analysed, but which, if it be analysed, reveals itself as partly mental and partly non-mental. The first consequence of this doctrine is the paradox that what have often been called sensible qualities are never "sensed". Yet, were we blind, I doubt whether this would strike us as a paradox at all. When I touch a table and say it is hard, or a file and say it feels rough, I do not attribute my cutaneous sensations to the table or the file; the sensations are mine and mine only, but the sensible qualities of hardness or roughness belong to the things. Similarly when I say that the water feels hot, I do not mean that it feels the temperature-sensations which I feel; nor is the sweetness of the sugar the taste that I enjoy. In all these instances, as soon as we begin

to analyse,¹ we do in point of fact distinguish between the sensation and the "sensible quality," and, as Reid said, they are unlike one another. We do not regard the sensations as qualities of any material thing. No doubt we have come to localise them up and down our bodies, and this fact of localisation seems to me to raise difficulties; but at any rate we do not regard them as qualities or characters of our bodies. These touch sensations do not belong to my fingers as length or roughness of the skin does; even this pain does not belong to my tooth as the hole in it does. Much the same is true of smelling and, I think, of hearing. We should if pressed distinguish between sound-sensations and objective sonority, though our ingenuous analysis is apt to falter here, firstly because we do not (apart from scientific theories) make up our minds what it is that is sonorous, and secondly because we tend to localise sounds outside of our bodies. We do this, however, in a curiously uncertain manner, and can easily abstain from doing so; and then we hear all sounds in our ears or our heads, but again not as qualities of the body, but as ours in our ears or heads. So long, then, as we leave vision out of account, the distinction between our sensation and the sensible quality seems clear, and equally that both are apprehended in perception, the sensation making us to apprehend the quality. The distinction and connexion of the two are indicated by the perceptual reaction. When the philosopher walks into his unlit study meditating on the heresies of psychology, and suddenly knocks his leg against the table, he first withdraws his leg from the table and then kicks the table, not because the table feels the pain, but because he does and it doesn't (but ought to). He reacts, that is, not merely or mainly to his sensation, but to the thing.

In vision, however, the distinction is not so obvious. When I touch the table, any one would say, I (1) have certain sensations, and (2) perceive the table's hardness; but it is very likely that the same person would not allow that when he sees the table he (1) has certain visual sensations, and (2) perceives the brownness. He would say simply that he sees brown. If he has a visual sensation or immediate experience of brown distinct from the brownness which he attributes to the table, he does not notice it. If you bid him distinguish between brown as an event in his life-history and the table's brownness, he will very likely confess himself unable to do so, though he will readily distinguish between his perceiving the brown table and the table's brownness. If you say to him: "But take an analogous case. This water feels cool to me, but to you who are cool it will seem warm. Similarly the

¹ As to our meaning before we begin to analyse, I agree with what Dr. Stout says in the *Proc. of the Aristotelian Society*, N.S., iv., 143. But I do not agree with him when he says (vol. ix., p. 232) that the difficulty of distinguishing between presentation and perceived objective quality begins when we pass from organic sensations to those of special sense. I think that it begins with vision.

table which looks brown to you looks another colour to me," he may reply: "The cases are not analogous. You have certain temperature sensations and I have dissimilar ones; we can notice them if we try. The water doesn't have them at all. The warmth or coolness that we attribute to the water is something different from them. But the colour I attribute to the table is indistinguishable from what I suppose my immediate experience would be if only I could, as you bid me, find the immediate experience. Of course I admit that what colour I see may depend partly on possibly abnormal personal conditions, and I may discover by means other than present vision that the table is not brown, just as I may discover that the water is not warm. But I am not concerned with the question whether the table is really brown, or has really any colour: I am simply hunting for an immediate experience which you tell me I have but I cannot discover."

A difficulty of much the same kind arises with regard to extensity, and I therefore pass on at once to the doctrine of immediate experience in its relation to that of spatial perception. Dr. Stout has modified his exposition in many details, which cannot be discussed in this notice, and I must confine myself to a few of the more important points. In general the position defended is the same as before. The psychological problem is "to inquire how spatial perception develops from vague and imperfect to more definite and perfect forms". I think that this is the real, and only, problem for psychology. It is the only problem, because in the end we have to come back upon the fact which neither can receive nor perhaps requires further explanation, that an intelligent soul is able to perceive a spatial world. It is a real problem, because the soul is not at all times equally intelligent but in the course of this life gradually comes to perceive a spatial world better, so that we may fairly ask under what conditions this improvement takes place. No doubt the problem is not real if we assume that all through life the soul is equally intelligent, or that though it grows in intelligence its growth depends on no assignable conditions or on totally different conditions in different people. But it is difficult to find arguments in favour of any of these suppositions. I think that in his articles on the subject, in many ways so admirable, Mr. Joseph really implied that the soul is at all times equally intelligent; but greatly as I admire his intelligence, I cannot believe that it was really as developed when he was in his cradle as it is now, or that he really thinks so. But when Mr. Joseph writes: 'I still think that "to be is one thing, to be perceived is another," and that when I perceive, I perceive something in space, existing independently of its being perceived,' I find Dr. Stout in complete agreement with him, except for the reservation that "immediate experiences" exist only in being perceived. And this reservation, as we have seen, does not mean that we first have merely immediate experiences and then somehow pass on to perception of

things, but that concrete perception is both of immediate experiences and of things.

Dr. Stout's solution of the genetic problem is, shortly, that the definite apprehension of an order of spatial co-existence "arises and develops only in connexion with that peculiar aspect of sense-experience . . . called extensity, and more especially the extensity of sight and touch," such extensity being "a local sign *continuum*". But as mere extensity can only yield a vague apprehension of extension, and cannot by itself supply all the conditions of the perception of definite position, distance, direction and shape, we must have recourse to another factor, *viz.*: "experiences in the way of movement". These latter, Dr. Stout is now careful to divide into (a) motion presentations, a peculiar kind of immediate change-experience, and (b) motor-sensations which accompany the varying positions of the limbs. The detailed working out of this view remains in essence the same as in previous editions, though the greater part of the chapter has been re-written, the passages on localisation and projection in particular being greatly expanded, and many ambiguities of diction removed. Attention can here be called only to two of the most important points.

(1) Dr. Stout now affirms more clearly than before that the category of spatial unity is operative from the first and throughout. That is to say, when our immediate experience of extensity makes us apprehend a thing as extended, as it always does, "this extension is not thought as self-complete and self-contained, but as continued beyond itself," even an apprehension of a third discussion being from the outset involved in the apprehension of surfaces.

(2) Were it not a necessity for the mind in having immediate experiences to think of their conditions, did not sensuous presentations in a primary (and not acquired) way mean something beyond themselves, then the growing complexity of the relational order of sense-experience could never carry with it an improvement in our apprehension of the relational order of the conditions of our sense-experience. For example, "the continuous shifting of the local signs" in active exploration of the surface of a body, and the gradual change of presentations, would result only in an apprehension of a temporal sequence of sense-impressions.

The difficulties that have worried me, and probably other readers, concerning Dr. Stout's account of spatial perception do not lie in the details so much as in the conception of an immediate extensity-experience itself. In determining what exactly is meant by the term I shall make free use of certain elucidatory remarks which Dr. Stout has kindly sent to me.

(1) It is not an immediately apprehended quantity which, while admitting moreness and lessness and including internal diversities that act as local signs, is not only non-intensive but also non-extensive. So much is clear.

But (2) it is not an awareness of extent. Awareness of extensity

is an awareness of the extent of sense-presentation, but the extensity-experience itself rather, so Dr. Stout writes to me, "*is* extent, just as a feeling of pain actually *is* pain and not merely the perception of pain. When we perceive a sensation as extensive, the extensive character really belongs to the sensation."

(3) Being a character of sensation, it is not to be confused with the apparent or, as it would often be called, the perceived extension of the object as distinct from what for reasons beyond the present perception we have reason to believe to be the "real" extension of the object. The apparent size of an object usually depends on other conditions besides the extensity of the sensation, though no doubt the two are not as a rule explicitly distinguished. Extensity, then, is extension, not as thought, but as immediately experienced, and without the extensity-experience extension would not be thought. Now the difficulty recurs that was mentioned in connexion with colour: can we in direct analysis of the single percept distinguish the alleged immediate experience from the objective extension perceived? It may be argued that all the examples given of awareness of tactual extensity are perceptions of this or that tract of the body, indifferently well delimited; and similarly that awareness of visual extensity is, at any rate for direct analysis, not only inseparable but indistinguishable from awareness of objective extension. We may draw at least three different, though not altogether unconnected, distinctions: (1) between the characters which the object "really" has independently of being perceived, and its perceived characters, (2) between its characters as perceived under whatever we choose to call "normal" conditions (often also called its "real" characters), and its characters as perceived now under these conditions which differ more or less from the normal; (3) between the characters of the object as perceived now under these conditions and our sensations or immediate experiences. The first of these distinctions is not psychological at all. The second sets a psychological problem applying to all perception. The third can easily be reached by direct analysis of most kinds of sense-perception, but can it be thus reached as regards vision: or in respect of extension and extensity, whether tactual or visual? Can one distinguish between colour or extensity as immediate experiences and the corresponding characters of the object as apprehended in the same perception? When, for example, after giving some examples of tactual extensity, Dr. Stout concludes: "Doubtless the awareness of extensity, whether crude or articulate, is inseparable from some awareness of extension, correspondingly crude or articulate," may we not reply that in any particular percept they are not merely inseparable, but indistinguishable, or if distinguishable at all, distinguishable only by an indirect argument?

I do not think that the difficulty is any greater for extensity than for colour. Now if we deny the possibility of the direct

analysis in respect of colour, we shall have either to deny that there are visual sensations comparable to other kinds of sensations or to rest the whole weight of the distinction between visual sensations and corresponding sensible qualities on an indirect argument. The former alternative is attractive, but clearly in the end untenable; if we try to adopt the latter alternative, it is difficult to see, as Dr. Stout points out to me, how we ever come by the indirect argument. If we are incapable of the direct analysis of our visual percepts, we must in each percept identify the sensation and its variations with a quality of the thing and its variations, and we could never have reached the thought of an objective quality distinct from the visual presentations. Thus it is probably a mistaken confession of incapacity if any one believes himself, as for a long time I believed myself, incapable of making the direct analysis. No doubt it is less easily made in vision than in any other mode of sense-perception, chiefly because the meaning of visual sensations is so much more interesting than the sensations themselves. The successful performance of the analysis is, I am now convinced, mainly a matter of practice, though I am still far from being able to say with Dr. Stout that "I find it at least as easy to recognise visual sensations as such as any other class of sense-experiences, except perhaps the organic".

Tactual extensivity is fairly easy to distinguish from the extension of either the thing touched or the touching surface of the body, when once attention is rightly set. In vision the analysis is certainly difficult, and I used to think it, at any rate for myself, impossible. It will be of service to readers of the *Manual* if, with Dr. Stout's permission, I quote some observations of his on this point. "The sheet of paper before me is perceived as very much smaller than the more distant door. But if with one eye closed—the closing of one eye is convenient but not necessary—I interpose the paper between the other eye and the door by holding it out at arm's length, I become aware that the extent of the visual presentation of the paper is greater than that of the door. I am not confusing the fact that the paper intercepts the vision of the door with the result of a real comparison of visual magnitudes. The extent of the visual apparition of the paper is not increased; and what I become aware of is that it occupies a portion of the field of visual sensation larger than that which was previously occupied by that of the door which has now disappeared. I can obtain the same result by merely thinking of interposing the paper without actually doing so. Nay, even without this mental experiment, I often succeed, probably as the result of practice, in directly comparing the relative extent of visual presentations (as contrasted with the relative extent which for perception appears to belong to things seen)." For my own part, I have tried this and a number of similar self-observations, and find myself succeeding with slowly increasing facility. This is a kind of analysis which each

must perform for himself, and he who cannot perform it has no right to deny therefore that others can.

The doctrine of immediate experiences in general and of extensity in particular no doubt raises a number of difficulties. Some of these are metaphysical. Dr. Stout in *MIND* indicated all too briefly his metaphysical view, but this does not concern us here. The first question for psychology is whether the experiences are to be found by the impartial observer as they are described, and whether they do, as is stated, in all perception mean something beyond themselves. For my own part I am convinced that the psychological analysis is correct, though I feel less certain of the metaphysical doctrine which Dr. Stout connects with it, and indeed of the exact meaning of that doctrine. Psychology performs the analysis, I take it, mainly for convenience in subsequent genetic treatment; it starts from the concrete percept, and its analysis is not arbitrary because it follows lines of cleavage, or rather of articulation, found in the percept itself. That the fragments can soon be bled white, may very well be, but in the meantime their separation serves a useful, though strictly abstract, psychological purpose. Doubtless it is the same reality that is at once felt and "meant," or thought, but neither the assertion nor the denial of this proposition need affect the psychological utility of the analysis.

Where the doctrine seems to me chiefly to need further development is in the reaction of the meant upon the felt. The acquirement of meaning, which Dr. Stout discusses so fully, is not merely the acquirement of, so to say, an additional burden which the sensation carries; it is a modification of the sensational experience itself. The most obvious example of this is localisation. Both localisation and projection, says Dr. Stout, are acquired meanings. This is true, but it is not enough to say, *e.g.* that the localisation of skin sensations consists in their informing us of the extension of the surface of our own body (p. 480). A pain or a cutaneous sensation in one's finger is in a simpler sense localised there, though it is not a quality of one's finger, and the sensation itself is modified by the meaning it has acquired. In general, what we feel must in part depend on what we think, just as what we think upon what we feel.

There is a familiar difficulty about relations with which critics are fond of worrying the supporters of any doctrine of immediate experience. When it is said that the apprehension of such relations as resemblance, difference, and succession between objects independent of the mind is conditioned by the apprehension of the same relations between immediate experiences, we have to remember that in the mind whose development the psychologist is tracing the relations between immediate experiences can be apprehended only as themselves immediate experiences, whereas the psychologist can think of them as relations between immediate experiences which he is not experiencing because he has already

thought of these relations between other things independent of him. Confusion easily follows if this distinction, familiar enough to us, is not impressed upon the student who is beginning to study psychology. Dr. Stout has introduced into book ii., chapter i., a section on Change-sensations in which the point is quite clearly stated for change and motion; a general discussion of it in an earlier chapter might, however, have been advantageous.

I must speak more shortly of the other kinds of immediate experiences. Imaging raises just the same, but no new, difficulties. Of imageless presentations Dr. Stout says: "The nascent excitement of complex dispositions is accompanied by modifications of immediate experience. . . . In understanding the word 'wealth' we not only have the intellectual apprehension of a certain object, but feel in a peculiar and distinctive way, and . . . in understanding the word 'health' our immediate experience is, so to speak, coloured in a different way. . . . It is not merely or mainly through images . . . that the excitement of a complex disposition tells on our conscious life, and conditions the thought of objects which are not directly experienced. It operates also by giving rise to indefinite and not further describable experiences which may be called imageless presentations."¹ The occurrence of such experiences is indisputable, and the further account given of the conditions of their occurrence wholly admirable. But two questions arise about them. (1) Are they "objective," in Dr. Stout's sense of the word, or are they not, as he sometimes calls them, "quite peculiar feelings"? If, as I think, they are non-objective feelings, they ought not to be classed under "presentations". (2) Do they condition or give a cue to our thought of objects not immediately experienced, or are they simply concomitants of our thinking? They seem to me to be concomitants, and this must be so if they are not really presentations.

In the account given of subjective immediate experiences there are two points on which one wishes that Dr. Stout had been rather more explicit.

(1) Are there any such experiences besides feelings? Most of the examples given are feelings—feeling glad, sorry, jealous, angry, and so on. But occasionally Dr. Stout speaks as if attending, desiring, liking, willing, believing, etc., were immediate experiences (p. 8), though he does not call them subjective states outright, but "states, acts, or functions". The proper attitude of analytic psychology towards all the active '-ings' is, no doubt, a very difficult matter. The fundamental difficulty concerns thinking itself. The genetic problem is comparatively clear: under what conditions do we gradually come to think such and such objects in such and such ways? But psychological analysis is apt to try to isolate thinking both from other "states, acts or functions" and from objects thought, with the result that there is nothing left in

¹ Pp. 173-176; cf. pp. 531-533.

the way of an experience. To feel a feeling is simply to have the experience, and a feeling's being felt is simply its being there. Thinking, in so far as it involves active attention, involves feelings and sensory experiences, and in reference to them we may fairly speak of acts of thinking as immediate experiences. But they do not constitute thinking itself, and thinking itself, as soon as we abstract from objects thought, is not experienced at all. If Mr. Alexander's 'enjoyment' implies being in some way experienced, I do not believe that thinking either is or conceivably could be enjoyed. At this point the abstract analysis of psychology seems to me to break down hopelessly.

(2) How are feelings and sensations related to one another? Dr. Stout says in one place that sensations "are not immediate experiences which enter into the constitution of such subjective states as attending, desiring, liking or disliking, etc.; on the contrary they are immediate experiences which enter into the constitution of objects apprehended, attended to, liked or disliked" (p. 9). The reference in the latter clause is, of course, to the complex unanalysed objects of apprehension. But what of the former clause? It is generally maintained, and in some sense Dr. Stout admits elsewhere, that sensations do enter into or somehow colour at any rate the feelings accompanying, say, attention or belief, and again the emotions. Apparently he is indicating, though not very definitely, that sensations are not generically distinct from feelings, but are feelings possessing significance for cognition.

The whole of the second part of book iii. is now entitled "Growth of the Perception of the External World" in place of the old heading "Special Percepts". To the chapters on Spatial Perception reference has already been made. The alterations in the chapter on Temporal Perception are improvements, but do not need particular mention. The first and second chapters of this section, however, have been almost entirely rewritten, and are now, perhaps, the strongest and most important part of the whole book. The nature of the psychological problem is clearly stated at the outset. We have to take the belief in external objects as a datum and trace its development from rudimentary to more complex forms. "The knowledge of external objects is from beginning to end dependent on sense-experience. But as mental development advances the value of a given sense-experience comes more and more to depend on its acquired meaning; and it is the distinctive function of the psychologist to trace the steps and stages through which meaning is acquired by attention, retention, association, and reproduction."

The first problem, therefore, is to determine how much must be assigned to sensation as its primary meaning in distinction from its acquired meaning. It is not enough here to repeat that perception is not merely awareness of sensation, but awareness of sensation as conditioned by something other than itself; for our

belief is not simply that there are external things, but that they are members of one external world. This belief in the unity of the world cannot have developed from a string of perceptions in none of which it was present in a rudimentary way. Nor is it enough to point to the sensation-continuum, "because the growth of the knowledge of external reality constantly involves the breaking-up of this original sense-given unity" and the recombination of data in new ways. "We must," therefore, "assume from the outset something answering, in however vague a form, to our developed consciousness of the world as a unity". This rudimentary awareness of unity shows itself in various forms, as awareness, for instance, of spatial, and temporal, and causal unity, and of the unity of attributes in the same subject. These categories "belong even to rudimentary perceptual consciousness as a condition of its further development".

Those familiar with the *Manual* in the past will see at once how much the exposition has gained in clearness. The categories were there "forms of synthesis," and it was open to suspicion (though undeserved) that they somehow synthesised sensations into independent things. There is no longer any justification for that suspicion. To sensationalistic psychologists, therefore, these chapters will seem perverse. They will seem perverse also to those who acknowledge no genetic problem at all. On the other hand, the majority of psychologists, including even those who, as metaphysicians, are realists and reject the doctrine of immediate experience altogether, will find the treatment of the categories in perception extremely valuable.

The percept is not, as so often supposed by psychologists, something with clean-cut, definitely demarcated contours. It always points beyond itself. In perceiving an extended thing, we think its extension, not as self-complete, but as continued beyond itself; every apprehension of duration or change, points, however vaguely, to a 'before' and 'after'; the perceived object is 'something regarded as qualified by an attribute,' but so that this attribute is not taken as constituting the whole nature of the thing, but "the mind is prepared to look for further attributes"; the explicit thought of causal connexion could never have arisen unless a perceived change were treated from the outset "not as something self-existent in isolation, but as something conditioned by and conditioning other changes". At the perceptual stage, of course, the categories express themselves directly in action; they are necessarily involved in the prospective, expectant, seeking attitude itself. This chapter deserves the title, "Prolegomena to any future Psychology".

So much at least being premised as primary, there follows the task of tracing the development of the perception of an external world. Here Dr. Stout allows that much remains to be done, and he himself selects a few of the more important questions

for special treatment. First, how do we come to single out separate things? In answer to this, Dr. Stout begins by repeating the paragraphs on Thinghood from pages 329-330 of the previous edition; he then indicates other conditions such as spatial contour, change of an object in apparently unchanged circumstances, change of circumstances whilst an object is apparently unchanged, and the like;¹ and finally he indicates the percipient's own body as fulfilling, above all others, the requirements of perception of separate-ness.

It is next argued that "the growth of the distinction between the body of the percipient as a thing separate from other things coincides with the growth of the distinction between the embodied self and other parts of matter as spatially external to it and independent of it," and that "this, again, makes possible the distinction between the qualities of things and their varying sensible appearances". But here there seems at first sight to be a gap in the argument. Granted awareness of self, it may be said, the account of its development is excellent; but out of what does this awareness of self develop? We must postulate some rudimentary awareness of self from the outset, no less than of things, and the self of which we are aware must be apprehended as not being merely in this moment, but vaguely as having a past and less vaguely as having a future. This is, however, as I understand, Dr. Stout's view. It is involved in his account of instinct, and in the section on temporal unity, and generally in his insistence on the prospective attitude, which is never simply expectation of something to come, but of something to come to me and something which I must prepare to react to; and on page 41 the doctrine is quite clearly laid down that "explicit awareness of self" is "pre-conditioned by implicit awareness" of self. Again, the primariness of rudimentary self-consciousness is presupposed in the note on page 433, according to which "projection of the self" is "equally primitive with the apprehension of material things". Is it not probable, indeed, that such "projection" is involved in the apprehension, if not of all, at any rate of very many things which afterwards we come to regard as merely material? If that is so, and it seems to be fairly well established, the development which psychology has to trace consists partly in the depersonalisation of material things. But it seems to me that a more compact discussion of primitive self-consciousness and of "projection" (if we must call it so) and recognition of mind in others, and of the influence of each on the development of the other from an indistinct to an explicit stage, ought to find a place in the first of these chapters on the perception of the external world.

The next section treats of the distinction between external reality and its sensible appearances. Here an ambiguity is removed, for

¹ The word 'presentation' is used rather ambiguously here, p. 452, line 5.

it is clearly stated that the externality now to be considered is externality to the percipient's body, and therefore presupposes the distinction of his body from other things. But "since the body of the percipient is primarily apprehended as an embodied self, such externality appears as, in a sense, externality to the self". The main question, then, is how we come to regard some changes as changes of a thing itself, and others only as changes of sensible appearance. "Our main clue is the category of causality." Thus if changes in my percept are found to vary with my free movements and varying bodily position, I apprehend them as conditioned by me and not by changes in the thing itself. If my movement is resisted or impeded, I find that I have to accommodate my efforts in amount and in direction to the thing, and the perceived change, *e.g.* in position of the thing, persists as a condition to which my motor activity must henceforth adjust itself. If changes in the perceived object take place without any movement on my part, I regard them as real, and gradually I come to refer them "to a causal system of their own contrasted with that to which mere change in sensible appearance is due". The exposition is vastly more clear and intelligible than that in the corresponding chapter of the old edition.

The fourth book has been less altered than any other part of the volume. In the first chapter the chief changes are the introduction of a section on imageless thought, a re-writing of the account of hallucinations in terms of acquired meaning of presentations, and a new heading to § 4 (old § 3). The new heading is "Likeness of impression and image," in place of "Likeness of object as perceived and object as imaged". The reason for the change is obvious: the independent object remains the same, however apprehended, and is meant as the same. But the word *Impression* is now introduced for the first time, and will certainly cause some confusion. Would not 'perceptual presentation,' though clumsy, have been safer? The term is used a few lines lower down.

In the chapter on "Trains of Ideas" there are several alterations, of which the most important is the introduction of a few paragraphs on the "ultimate nature of ideal construction". This addition is all the more desirable because Dr. Stout never tells us in the *Manual* what an "idea" is. In the *Groundwork* he defined it as a "significant mental image," saying that it has "two components, an image and its meaning". Its meaning, I suppose, must be that which is meant—that which, when we have the image, we think. On page 191 of the new edition of the *Manual* he has raised the question whether we are to call a reproduced meaning an idea. Here the idea seems to mean the object thought, though I do not understand how the object, which is not an immediate experience, can in any natural sense of the word be said to be reproduced. An immediate experience has acquired

meaning, i.e. in having it we think of an object again in a way which does not correspond merely to the primary meaning of the immediate experience, but is due also to previous like experiences and the thoughts connected therewith. But the phrase "ideal construction" seems on the face of it to imply that by thinking we put the object together. The new paragraphs contain a warning against taking the term in its obvious sense. The process really consists rather in finding than in making: it is a "transition from the apprehension of the actual to the thought of the possible". Briefly, it is not construction at all, except perhaps on the side of immediate experience (image), but is the discovery of fresh possible variations of a universal or common nature already known. Need we then continue to call it construction? For instance, in the chapter on the external world as ideal construction, when Dr. Stout is considering our belief in the continued existence of things when unperceived, would he not do better to speak outright, with Hume, of supposing, concluding, inferring? For he has a right to these notions, whether or not Hume had. It is significant that the chapter on the Self is no longer headed 'The Self as Ideal Construction,' but 'The Self as Ideally Apprehended'.

The changes in the remaining chapters are few and of minor importance. I feel that this review has dealt too often with trivial points, and that the great merits of this new edition have not been allowed sufficiently to shine through. Dr. Stout has revised, I do not say his principles, but at any rate his language, with extraordinary determination and care. The *Manual* is now not only a much better book than it was, it is in my opinion the best of the very few very good books on Psychology that have been written in modern times.

T. LOVEDAY.

Jahrbuch für Philosophie und Phänomenologische Forschung, in Gemeinschaft mit M. GEIGER, München; A. PRÄNDER, München; A. REINACH, Göttingen; M. SCHELER, Berlin; herausgegeben von EDMUND HUSSERL. Erster Band. Halle a.d.S.: Verlag von Max Niemeyer. 1913. Pp. vii, 847.

PROF. HUSSERL's essay entitled "Ideen zu einer reinen Phänomenologie und Phänomenologischen Philosophie," containing the first of three "books" in which he proposes to deal with his subject, stands in every sense in the foreground of this valuable *Jahrbuch*, occupying 323 out of its 847 pages, and laying down the outlines of a science which he conceives to be new, and to be the prologue to a new philosophy. The contributions of his colleagues, dealing with particular applications of the doctrine which they hold in

common, are however of considerable independent interest, and are also of great service in illustrating the contentions of the main theory, which demands, as Prof. Husserl frequently insists, a special effort and a special point of view.

Phenomenology as here spoken of is "pure" or "transcendental" Phenomenology. In one section-heading there is mention of Phenomenology of the Reason (*Vernunft*). But as a rule the word is accompanied by no genitive case. It is not, I suppose, the Phenomenology of Consciousness as Hegel's was that of Mind. It is rather Phenomenology *par excellence*, whose method however consists in considering the vital experiences (*Erlebnisse*) of consciousness in a certain way.

I will try at once to indicate its fullest import, premising, however, that the author, in complaining of misrepresentation, lets us see that the expression "descriptive Psychology" had at one time, in the days of *Logische Untersuchungen*, been applied to it by himself. Then, as often happens, the phrase came to be used by others as a facile clue, after the author's views had far outstripped it. The new science, as he now conceives it, is in a way descriptive, but is not psychology. For Psychology is a science of facts, while Phenomenology is a science of essential connexions, and these not "real"; not part of the world of things and events, as the objects of Psychology must be.

Phenomenology, then, if I have understood it right, is the science of the essential connexions of vital experiences (*Erlebnisse*), as rooted in their nature or character; not, for example, of their causal connexions as events in time. An elementary example is the truism that sound, essentially, is not colour; or, to cite what I judge to be a favourite instance—colour is essentially inseparable from extension. For the purpose of letting us "see" these connexions and distinctions our consciousness, as the familiar instrument which we exploit in order to our orientation in the actual world, is replaced by a "preparation" which I might call a "statutory"¹ consciousness, that is, a consciousness that has been treated according to certain rules. The purpose of these rules is to throw us into the phenomenological as contrasted with the "natural" focus or attitude (*Einstellung*) of our minds. Their operation is to eliminate, to put out of court (*ausschalten*) all the existent realities which in the natural focus of the mind our consciousness perpetually presupposes or affirms. To eliminate them, that is, as affirmed realities; but not to eliminate from our purview the fact that they are affirmed. They are, we are told, to be "bracketed," "put between quotation-marks". Or, they continue to be for us, but with a change of sign. We study not themselves, but the character of

¹ It is my own phrase, drawn from such a fact as that we in England have to return for taxation a "statutory" income, *i.e.* not what we actually receive in twelve months, but an artificial figure, prepared according to certain directions.

the "*Erlebnisse*" by which consciousness affirms them, and the fact that it does imply or "intend" them.

All "transcendences" are in this way ruled out—that of the spatio-temporal world, of God, even of the truths of abstract logical science. Nothing is directly accepted but what is immanent in vital experience itself, as, for instance, in some degree, the "pure ego".

What, then, is the procedure of the science, and what has it to discover?

The procedure is "intuitive". Ratiocination, and especially metaphysical deduction or argument "from above," are altogether excluded; as again is experience or induction in the sense of inference from facts to facts. The "principle of principles" is thus stated, "Every originary dator intuition¹ is a source of justification (*Rechtsquelle*), of knowledge, and everything in the intuition which offers itself as originary is simply to be accepted as it presents itself, *but* only in the limits in which it presents itself. This no conceivable theory can make us doubt" (p. 43.), or again "Sehen überhaupt als originär gebendes Bewusstsein welcher Art immer, ist die letzte Rechtsquelle aller vernünftigen Behauptungen". (p. 36). (It is here that we find the noteworthy observation, "ein Sehen mit einem anderen Sehen streiten kann und ebenso eine rechtmässige Behauptung mit einer anderen".) You can *see*, in short, essential characters and connexions, as you can see that $2 + 1 = 1 + 2$ and that nothing can alter this. And, finally, though descriptive of essence, Phenomenology is not "exact". Exactness is a feature of some regions, but some are *essentially inexact*. Phenomenology is *not* a Mathematic of *Erlebnisse*. The author points out that similes (club-shaped, serrate, etc.) do the work *e.g.* of botany in a way in which geometry could not. The use of similes is a marked feature of all the papers.

And what sort of thing does the science hope to discover? by what sort of truths will it enrich our philosophical equipment? Here it is of interest to adduce a note in *Logische Untersuchungen*² which shows us pretty clearly that the author came to his doctrine by the road of descriptive psychological consideration of the factors actually (*reell*) "lived" (*erlebt*) in conscious experience. Thus he would arrive at, *e.g.* the relation of colour and extension, or the necessity of the spatial modifications (*Abschattungen*) apart from

¹ The introduction of a number of new technical terms, some, I almost think, new German words, is characteristic of the theory, which takes itself as a new point of departure. "Originär" (*Gegebenheit*, *geben*, *gebender Akt*, *gebende Anschauung*) applies always to the *best* source, *e.g.* to sense-perception as compared with memory or *Einfühlung*. "Erschauen" is by definition (*Log. Unt.* ii., 386) "unmittelbar adäquat erfassen". *Wesenserschauen* is a favourite term. "Eidetisch" knowledge or truth is that founded in intuition of the *Eidos* or *Wesen*. "Einstellung" = mental focus or attitude.

² II². Part I. 397.

which no spatial perception is possible, and which are essentially inexhaustible; while an *erlebniss* or feeling itself is what it is, and can be apprehended through no such aspects or modifications, due to changing points of view.

But his conception (see not. cit.) subsequently enlarged itself to include not merely the factors directly "lived" in consciousness, but also their intentional significance; so that the climax and main emphasis of the present essay lies in the relations of noesis and noema—the insight into the "acts" by which the grades and structures of actual (*reell*) consciousness (noetic) build up correlative grades and structures of intentional objects (noematic) from single objects of sense-perception to things and values of every complexity. Thus the consideration of intentionality in all its forms—not only in judgment but in will and feeling, plays the principal part in the work before us, and we find given in principle the foundations of the general sciences of values and of ethics.

The order of the work is briefly this. The author first explains, in a short logical discussion, the relation of fact to essence, pointing out how essence is inseparable from fact, but sciences of essence in no way depend on sciences of fact; and he draws out the conception of abstract and concrete as dependent and independent being. On this follows an account of the meaning of "region" and category, making clear that the formal logical region of "objects-in-general" is not a superior genus to which all concrete regions are to be subordinated. A region is the highest genus of a concrete—a system of laws or forms, such as that which geometry provides for a single character—spatiality—of things. Every character of a "thing" falls within a similar inclusive determination, and the system of these determinations is the "region" "thing".

Following on this is the author's criticism of empiristic fallacies, claiming for his own view, we may presume as against the school of Mach, the title "Positivist"—"if that means adhering to originary apprehension"; while on the other side he condemns the idealistic confusion which treats "*Evidenz*" as established by a peculiar feeling of necessity.

Then, as a preliminary to explaining the Phenomenological attitude, he deals in a most valuable section with the relation of consciousness to natural reality, with the province of pure consciousness, and the phenomenological reductions of which we have already spoken. The treatment of the sensuous and "physical" thing in their respective relations to consciousness and to each other is of the highest value and sanity, and the criticism of the "sign" theory is particularly effective. "Even the higher transcendence of the physical thing," he concludes, "indicates no reaching-out beyond the world for consciousness."

Space forbids our saying much of the author's doctrine of the primacy of consciousness as against the world of things. I imagine

that in his startling sentence—"Ein absolute Realität gilt genau so viel als ein rundes Viereck," the word *Realität* indicates an aggregate of things and events—not reality in the pregnant sense which other theories ascribe to it. The world, so construed, presupposes consciousness, as whose meaning alone it *is*—this I take to be the doctrine, and *prima facie* I have nothing against it. Of course, as the author insists, it is *not* Berkeleyan Idealism.

After these discussions follows the theory of Intentionality, which has already been referred to, and a final section on the Phenomenology of Reason, dealing mainly with the nature of *Einsicht und Evidenz* as grounds of "the verdict of reason".

I am sensible that I have done very scanty justice to this remarkable paper. The fullness of its matter and the sanity and acuteness of its observations and distinctions merit for it ampler treatment than is possible in a review. The one word of criticism, or rather of speculative suggestion, which I shall venture to throw out, will come best after referring to the remaining contributions.

In Dr. Pfänder's paper "*Zur Psychologie des Gesinnungen*," our difficulty, for which, of course, so far as it concerns the resources of our language, the author is in no way responsible, is to know exactly how we are to render the term *Gesinnungen*. I should have thought that the word implies something persistent, and the author seems to recognise such an implication in his distinction between "*aktuelle Gesinnungen*" (= *Gesinnungsregungen*) and "virtual" and again "habitual" *Gesinnungen*. But as he decides to make "actual" *Gesinnungen* (or *Gesinnungsregungen*) the immediate subject of his paper, he disconcerts our desire to recognise the distinction between, say, a "sentiment" as a persistent attitude or structure, and an "emotion" as a temporary reaction. This point bears also on his complete severance of *Gesinnung* from conation (*Streben*). No one would say, perhaps, that it is a conation; but it is another thing to deny that it bears an essential relation to a persistent conative system. I should have wished to render the word *Gesinnung* by "sentiment" or "emotional disposition". But the restriction to "*aktuelle Gesinnung*" forbids this, and must make the subject of the paper pretty nearly equivalent to emotion. The author methodically distinguishes it from thought and opinion, from conation and will, from pleasure and pain. But perhaps he hardly gives an adequate positive account of the kind of permanent system in which the temporary emotion has its source.

Though the "actual" *Gesinnung*, then, seems rather like an emotion, the author is more concerned with what we should call a personal sentiment. He is thinking mainly of such phenomena as love and hate; he does not seem to have in mind such emotions as fear, suspense, anxiety, regret, surprise, elation, which refer to situations rather than to personal objects; though he recognises as objects of sentiment things, communities, and opinions. Thus he

is really dealing with temporary emotions based on quasi-personal sentiment; and is enabled to lay down the principle that *Gesinnungen* fall into two opposite classes, positive and negative, of the types of love and hate.

In describing the essence of *Gesinnungen* he has much recourse to similes, and expresses his agreement with Husserl's view of their value. Every positive *Gesinnung* is a centrifugal outpouring of feeling (*Gefühlsausströmung*), favourable, uniting, affirming. Every negative *Gesinnung* is of the same type, but injurious, dividing, negating. This centrifugal "*dreizinnig*" relation is essential both for love and hate. And further, in every *Gesinnung* the subject is either superior, equal, or inferior to the object. "Is"—for the subject may not feel so. A man, I suppose, may feel himself above his wife, but his attitude may show that in earnest he accepts her as above him. The whole account is framed on the basis of personal relations, and is couched in language of this kind. The spirit and thoroughness of the attempt are excellent; and the fact that I cannot recognise the aptness of all the above descriptive phrases may be due to my defects rather than theirs. A striking conclusion to the paper is a discussion of spurious psychical phenomena, both in the way of sentiment and of thought. Thus it is maintained that a lie is not a mere form of words or mere use of a rejected idea; the liar, in a way, even inwardly maintains it. He is really angry and offended (I add) when it is denied.

Max Scheler's paper "*Der Formalismus in der Ethik und die materiale Wertethik*" seems to me a very excellent and original piece of work. It is impossible here to dwell on its elaborate and valuable detail. The general contention is clear from the title. The object is, while accepting as final Kant's condemnation of all Ethic depending on experience of consequences or on prescription of Ends (Erfolg- and Zweck-Ethik), to defend against him another conception of a "material" Ethic, namely, one resting on a theory of *a priori* values. Such a contention involves not only the rejection of Kant's formalism, but the complete overthrow of his inverted egoism and hedonism, and his general "*Misstrauen*," to use Herr Scheler's phrase, of nature and the world. For nature (including human nature), the author urges, is no "chaos," to be organised from without; it is inherently organic. Throughout it is his aim to establish life and conation as authorities, so to speak, in their own right; in which, in their original and pervading orientation, the sense of values is involved, and their hierarchy progressively revealed. Not that conation is disciplined and habituated by the experience of pleasurable results; it is against all these ideas, against, one might say, all imposition of ends by the environment, that the author is desirous to protest. Values are implied in conation (*Streben*) *ab initio*; the pursuit of pleasure is a late and artificial phenomenon. The originality and wholeness

of life, as against the notion of a mere response to a physical environment, is what arouses the author's enthusiasm. If you take the sense-organs separately, and estimate their reactions under artificial conditions, you may get what you call "sensations," and then if you go on to compound the external world out of these, you arrive at the "philosophie—von Mach". "Und im gleichen Weise," he breaks out in a later passage, "sollen dann auch die Werte 'subjective Erscheinungen' sein die 'eigentlich' nur Namen für wechselnde Leibzustände (sinnliche Gefühle) darstellen". But the life-process, organism and environment are not there to produce sensation and feelings; sensation and feeling are in the service of the unitary life-process which gradually differentiates its reactions, revealing the fullness of qualities which exist in themselves, and the realm of values.

Values then are given, and given *a priori*, and in a hierarchy. It is a prejudice that only the sensuous can be given, or that relation, value, time and space, movement, and the rest, are constructed out of it; on the contrary, a pure sensation can never possibly be given. "The true seat of all values *a priori* is the cognition or vision of values which builds itself up in feeling, preference, ultimately in love and hate." The signs of higher rank in values are duration, absence of extension and divisibility, absence of being 'founded' on other values, depth of satisfaction, absence of dependence for appreciation on the persons or functions in which they are embodied.

I must pass from this remarkable paper, with which I have great sympathy¹, although I cannot but think that it is involved in the ultimate difficulty which appears to me to apply to this whole mode of thought.

Moritz Geiger, in his "Beiträge zur Phänomenologie des ästhetischen Genusses" first examines *Genuss* in general, distinguishing it from pleasure, *e.g.* from such a pleasurable emotion as gladness (*Freude*). The central difference, as I understand, lies in the absorption of the ego in a total experience (*Erlebniss*) which belongs to *Genuss*, while pleasure is not a total experience, but rather, to use my own phrase, an abstraction within one.

Then he proceeds to consider how much in the features of *Genuss* as such—for instance, its "*Motivlosigkeit*" or directness of absorption in its object—has been wrongly set down as characteristic of *Æsthetic Genuss* in particular. The true differentiation of *Æsthetic Genuss*, he concludes, is in the element of *Betrachtung*, which involves a certain holding at a distance of the object enjoyed, such as you do not find, for example, in personal activity, or "sport," or in enjoyable bodily sensations. And the minimum

¹ Two minor details there are wherein I must differ sharply. I cannot believe that *Gesinnung* is beyond the influence of education. Plato's Republic 401D I take to be eternal truth. And I cannot believe that evil is equally systematic with good. Here again I hold to Plato.

definition of Aesthetic enjoyment is formulated, not very differently from that of Kant, as "the disinterested (we cannot, I think, render "*uninteressirt*" by uninterested) contemplation of the Fülle of the object".

Is there not here some risk of conflict between the "holding at a distance" which admittedly involves a definite attitude (*Stellungnahme*) in Aesthetic *Genuss* and the total absence of definite attitude which is taken as a feature of *Genuss* as such (cf. pp 627 and 648) ?

I suggest, with great diffidence, that too much is made of *Betrachtung* and *Stellungnahme*, because, perhaps, a point has been missed in Kant's account of *Interesse*. Is not *Existenz* a more important factor in the definition of *Interesse* than the author allows? *Existenz*, I believe (I admit that I am reading something into Kant at this particular point, though not, I think, on the whole), gets its meaning from the contrast with *Schein*. The conception of aesthetic *Schein*, which Schiller drew from Kant's treatment of poetry, seems to me to carry us safely past difficulties and beyond restrictions too often insisted on, and partly countenanced even in this very able paper. The "existence" which Kant speaks of (as the correlative of *Interesse*) is surely to be illustrated by thinking of *e.g.* the real object represented in a picture as contrasted with the picture itself. It is the interest directed to that in the object which you cannot have in a picture of it, which is Kant's typical unæsthetic *Interesse*. But (and this leads to important results), no degree of interest, of passion or desire, addressed purely to the *Schein* or expressive spirit incarnate in the picture, has in it as such anything unæsthetic. If my interest in the Sistine Madonna makes me travel a thousand miles to see it, or my delight in a Turner painting makes me divest myself of half my goods to buy it, this is nothing in derogation of the æsthetic character of my interest, but may well be the complement and consequence of the intensest æsthetic passion. Thus the word *Betrachtung* exercises, I suggest, a deceptive influence which Kant's real conception does not sustain, and, by excluding, as we saw, the enjoyment of our own activity from the æsthetic category, rules out from the account of æsthetic enjoyment the artist's creative rapture, or the passion of the spectator who in some remote degree can feel with him, which appear to me to be its purest and highest forms. I believe the reason is that *Interesselosigkeit* is supposed to exclude passion and creative expansion. But Kant did not in the least mean this. He only meant to exclude a passion which is not directed to the absorption in *Schein*, but to the processes and consumption of existence exclusive of *Schein*. The layman's or connoisseur's *Betrachtung* is, I believe, only a frigid and superficial anticipation of the true æsthetic passion which the artist and genuine art-lover enjoys. It is, I take it, a *parti pris* in these essays, slightly diverged from by Herr Reinach, not to refer to Hegel. The reason is, I presume, that his method is distrusted,

and I shall say a word on it in the sequel. But here I cannot avoid suggesting that a page of Hegel, from say the *Einleitung* to the *Asthetik* would have kept the discussion on a straighter road. I regard the paper, however, as highly valuable, for its careful study of the full meaning of *Genuss* as such.

I may indicate Adolf Reinach's main contention in his essay "Die apriorischen Grundlagen des Bürgerlichen Rechts," and also its connexion with the main drift of the volume, by citing a few lines from page 694. "The peculiar character of ideal objects has recently once more begun to be recognised beside what is physical, and psychical. But the essence of these objects, number, concepts, propositions, etc., is their being out of time. Claims and obligations, on the other hand, arise, last for a definite interval, and vanish again. They appear to be temporal objects of a quite peculiar kind, hitherto unnoticed. We see how definite laws, concepts, propositions, are valid of them; [e.g.], a claim to a definite performance is extinguished in the moment that the performance has been discharged." The example, like the whole method of this volume, reminds us of Locke's suggestion for a moral science endowed with geometrical necessity, based on the comparison of ideas, giving such laws as "Where there is no property, there is no injustice". Only that a claim is here made to a more synthetic character.

The *a priori* system of these peculiar objects is sharply distinguished by the author from the system of moral obligations. Jural claims and obligations arise, he contends, from voluntary acts, and are extinguished by such acts; moral claims and duties do neither—they depend on situations. There is, he points out, of course a moral duty, e.g. to observe a promise, but the obligation created by the promise is prior to the duty.

This contention is fundamental, and I cannot think it is just. It appears to me to confuse the general fact of being such a creature as to recognise moral obligations, with the detailed organisation of life by which alone that fact becomes actually operative. It is not a matter of my voluntary arrangement that I have moral duties; but it is a matter of my voluntary arrangement what those duties are—whether I teach Greek or mathematics; whether my brother or I am responsible for the care of our old mother. Jural claims and obligations, the author says, are transferable by acts under certain conditions; moral claims and duties are not. Now what is true, surely, is that the general fact of moral obligation in practically infinite possible directions persists under the arrangements by which alone we give it practical effect, and may revive at any point on their failure. But nevertheless the arrangements which constitute the channels of duty, are *prima facie* valid, and draw their validity from the moral obligation which underlies them all, as exemplified in the arrangement by which they are specified. Jural rights, etc., are only an external case of such

arrangements. They are made by "social acts," as the author rightly reiterates; and that means that they are made possible by the social recognition which is rooted in the common moral consciousness, or constitutes the essence of a social act. Thus they draw their validity from the same source as moral obligations, that is, from the unitary consciousness which however tacitly (*cf.* the old example of men pulling oars in the same boat), recognises me and thee as partners who give and expect co-operation, and from whom, in external but necessary matters, it may under certain forms be exacted. The acts are merely specifications *ad hoc* of the co-operative consciousness.

None the less for this difference of opinion I recognise the excellent work done here in bringing home the difficulties of a full and clear statement in answer to such questions as "What is the essence of a promise? of representation? of property?" But I do hold that the different accounts *e.g.* of the validity of a promise, which the author reviews, social convention (Hume), psychological reinforcement (Lipps), damage by deceived expectation (Schuppe), should have suggested by their obvious relevance and equally obvious partiality that they are all sides of some one great fact, such as the social consciousness, and cannot be reduced to any isolated formal relation. If we bring together and interpret the conditions which the author himself insists on, "social act," "*Vernehmungsbedürftigkeit*," "*Verhalten von Personen*," and the like, we surely are driven to assign them a centre in the common consciousness.

I note that, with a view, as I suppose, to his conception of the *a priori* simplicity and self-evidence of, say, the implication of a promise, the author is inclined to justify the political contract theory against the criticism that it is a *ὑστέρων προτέρω*. And of course I agree that effective contracts or co-operation need not presuppose the developed State. But that any contract can account for the power to agree, *i.e.* to make contracts, does seem to me absurd.

I must however break off. The volume before us, as even this scanty sketch may have indicated, is full of thorough work. It is perhaps too soon to express an opinion whether the movement will prove able to fulfil its claims, and pave the way to a new and sound metaphysic.

But with reference to this possibility I do desire to make one general suggestion which may be expressed in a philosophical and again in a historical form.

First, if, as I gather, the apriorism here mentioned, with its *Einsicht* and *Evidenz*, is relative in every case to the whole under immediate contemplation, is it possible to predict the result when the whole contemplated begins to approach the absolute, and *all* the *Einsichten* have to be fundamentally reconciled with each other? It is a remark which has constantly forced itself on me in the consideration of theories of the *a priori*, that there is an

invincible tendency to confuse it with the *prima facie*. The true *a priori* must surely be absolute. But I understand that all the *Einsichten* and *Evidenzen* here in question are provisional (see Husserl, *Jb.* 1, 43 and 36-7). The isolation in which the several problems are maintained, as we have seen throughout the applications of the theory, the reiteration of the phrase that so and so "mit" so and so "hat nicht das mindeste zu tun," a phrase always suspicious in philosophy; the whole attitude of *Erkenntniss theorie*, pointing beyond itself to a world which it leaves disunited and unaffirmed—all this, if I am right, will undergo some radical transformation when once the question of first principles is seriously raised. Prof. Husserl has already in progress a treatment in which these matters will no doubt command attention, and we must suspend judgment at least till it is before us.

But, to put my ground for hesitation in another form, I cannot think the ignoring of the post-Kantian work to be methodically right or wise. The truer appreciation of its method, which has been arrived at since the days of the primary reaction, shows in it no such discrepancy with the methods of the work before us as some ironical allusions, which I imagine to be pointed at it, appear to presuppose, and to confront the post-Kantian work would be the same thing, I think, as to concentrate the provisional *Einsichten* in an ultimate view. Till this has been tried, we cannot, I believe, judge effectively where the movement would carry us.

B. BOSANQUET.

The Crowning Phase of the Critical Philosophy; a Study in Kant's Critique of Judgment. By R. A. C. MACMILLAN, M.A., D.Phil. London: Macmillan & Co., 1912. Pp. xxv, 347. Price 10s. net.

It is not often that a book which has so many good things in it as this one leaves the reader in so divided a state of mind. Dr. MacMillan has chosen a supremely interesting subject, and he has handled it with undeniable freshness and originality. Travelling over well-trodden ground, he has succeeded in surveying it from an unfamiliar point of view. At least, I am not acquainted with any book which reviews the *Critique of Judgment* from a standpoint so definitely *religious*. And the author's conclusions, revealing much of his own personal 'Weltanschauung,' deserve sympathetic attention. But, on the other hand, his standpoint is sufficiently disparate from Kant's to make his reading of Kant sometimes very forced. This must always be so where a critic sets out to make explicit Kant's 'inarticulate motive' (p. 330). Moreover, Dr.

MacMillan's style is frequently obscure, and his habit of throwing out, as he goes along, unelucidated *obiter dicta* on all sorts of things, does not make it easier for the reader to follow his line of thought. Perhaps Dr. MacMillan will appreciate my point if I say that, were it possible, I should recommend a reader to take the last chapter first and read the book backwards. He will understand it better, and enjoy it more.

The general drift of Dr. MacMillan's argument may be summarised as follows. His problem is the familiar one: What is the relation of the third *Critique* towards the first two? How far does it enable us to get beyond the sharp antagonisms between 'constitutive' and 'regulative' principles in knowledge, between inclination and duty in conduct, between the realm of Nature as conceived by Science, and the realm of the Moral Will with its postulates of Freedom, Immortality, and God? For Kant 'knowledge' means the world-view of Natural Science—a theory which, on a basis of sense-experience, actual and possible, conceives Nature as a 'Mechanism' of 'things' in 'time' and 'space'. But the world, conceived in these terms, exhibits characteristic marks of logical incompleteness and incoherence (the 'antinomies'). It is not, in technical language, the all-inclusive 'whole' which it ever strives, and ever fails, to be. Hence the antagonism between 'phenomena' and 'noumena,' the world in terms of science which is logically unstable, and the world in terms of philosophical speculation which, though the regulative ideal of knowledge, can, in Kant's words, be 'conceived' but not 'known'. The same antagonism is far acuter still within the realm of Moral Conduct, for it is now shown to penetrate to the inmost nature of man as an active, self-realising person. Appearing first as the conflict between desire and the self-imposed law of the rational will, it becomes for Kant identical with the antithesis between man as 'phenomenon,' a wheel in the Mechanism of nature, and man as 'noumenon,' in virtue of his freedom determining his own actions. And these standpoints are ultimately contrasted as 'knowledge' and 'faith'. Into this clash of theories the *Critique of Judgment* enters with a promise of reconciliation. In two directions Nature exhibits a 'purposiveness without purpose,' viz., so far as 'things of sense' are (a) beautiful, and (b) organic. There are no actual purposes, there is no actual maker. It is only *as if* an intelligent maker had made them. Still, in as much as the causal Mechanism is capable of producing such objects, we are entitled to speculate whether there may not, in the last analysis, be a profounder kinship between Nature and Spirit than the antagonisms in the realms of science and morality could have led us to expect. Thus the Theory of Beauty joins with that of Organic Teleology in pointing towards a positive, all-inclusive synthesis. No wonder that the *Critique of Judgment* has been acclaimed as the high-water mark of Kant's Philosophy.

Dr. MacMillan's argument moves within this frame-work, which I have here stated in my own words rather than in those of Dr. MacMillan's first chapter, in which he traces the movement in Kant's thought towards the 'new principle' of the third *Critique*. But it would be quite wrong to assume that Dr. MacMillan is either one of those who regard Kant's philosophy as final, or of those who, recollecting that the *Critique of Judgment* contains the germs of 'Objective Idealism,' treat it mainly as a step on the road to Hegel. It is in neither of these senses that Dr. MacMillan speaks of a 'crowning phase,' or expects 'the conjunction of Æsthetic and Teleology . . . to become the natural formula for the philosophy of the twentieth century' (Preface, p. vii). He is too critical of Kant for a Kantian, and too theological for a Hegelian. It is very clear that, when he speaks of the 'Supersensible,' the philosophical term covers no Absolute, but the God of Christianity.

The second chapter discusses the general character of the new principle, Reflexion or the Reflective Judgment. Incidentally, there are some interesting remarks on the meaning of 'objective' and 'subjective' in Kant. I quote from the author's "Analysis of Contents" (p. xiii): 'Objectivity with Kant refers to *province* rather than to content of Judgment, namely province of sense-objects'. But I cannot agree that the comparison of Kant's sense of 'subjective' with that of Descartes (p. 55) is equally happy. The point of resemblance seems to me to be superficial. Again, whilst I agree heartily with Dr. MacMillan that the 'I think' is not subjective in any sense which is opposed to the 'objectivity' of what I think, I cannot follow him when he says that the meaning of 'subjective' is 'personal as distinguished from divine or absolute mind' and 'free from the obligation to think the objects of external sense' (p. 56). I can find no warrant in Kant for this interpretation, which, moreover, seems to me to conflict with the author's own statement (sandwiched between the two quotations just given) that "the 'I think' shares the nature of the 'objective synthesis' and therefore may be said to lie at the basis of all knowledge" (*ibid.*).

The next four chapters deal with the details of the reflective judgment in the sphere of Æsthetics. There are many interesting points in them. Thus, in chapter iii. (which deals with the 'disinterestedness' of æsthetic enjoyment), I note the criticism of Kant's treatment of the beauty of geometrical figures, and some pages (76-94) in which Dr. MacMillan 'lets himself go,' giving us, in a discussion of realism and idealism in art, some interesting literary criticisms. From these he passes to a discussion of 'imitation,' and of beauty in photography, ending with some pertinent remarks on certain views of Croce. Chapter iv. has highly technical discussions of Kant's doctrine of the *Schematism*, of *Causality*, and of *Time*. In chapter v. the passages comparing Kant and Schopenhauer in respect of their theory of Music, and Kant and Schiller in respect of the place of charm in beauty, may be noted; also the beginning of a discussion of genius

which is resumed in chapter vi. ; and the author's tentative use of the term 'empathy' (p. 182). As far as I can judge, however, the meaning which Dr. MacMillan here proposes to assign to 'empathy' ('it is the limit at which consciousness is still possible without a determinate object') agrees neither with that of Prof. Lipps who first used the term, nor with that of Prof. Ward who first introduced it into English Psychology, nor with the author's own use of it in later passages where he speaks of empathy as 'the basis of Ethical Teleology' (p. 338) and as 'the deep self-affection of the subject' (p. 342). Chapter vi., on the Sublime, offers an interesting critical argument on Kant's theory. According to Dr. MacMillan, Kant errs by making the experience of the sublime too intellectual and too little imaginative, with the result that the sublime becomes for him non-sensuous, and therefore non-aesthetical. Here again Schopenhauer's theory is favourably contrasted with Kant's.

In the long seventh chapter, on 'Teleology in Nature,' I note a comparison of Kant's theory of Evolution with that of Darwin which would have benefited, had Dr. MacMillan been able to use the corresponding discussion in Driesch's *History and Theory of Vitalism*. There are also some critical observations on Bergson's Creative Evolution, and especially on his attitude towards Kant. But in the main the chapter, by a careful analysis of Kant's views, prepares the ground for the conclusions which Dr. MacMillan formulates in chapter viii., and especially in chapter ix. The following quotations fairly represent the outcome of the argument: 'Were it not for our moral consciousness, there would be no Organic Teleology and no really new principle. Such ends as Nature presents to us would remain what they are, empirical observations of which we can make nothing, if our moral consciousness did not encourage us to take them seriously. Our moral personality is the only clear instance of a self-contained end, and therefore of a natural purpose, and it is from this instance in ourselves, and from it only, that we are able to think of other purposive appearances as having inner teleology' (p. 310). Again: 'In Teleology alone do we unite the consciousness of a harmony in our immediate experience with the cumulative perception of a harmony in Nature herself, and so render intelligible the realisation of Freedom in the world' (p. 327). The most pregnant half of the *Critique of Judgment* is, therefore, not the *Æsthetic*, but the *Teleology*, interpreted as an *Ethical Teleology*, the experience of beauty having merely a symbolic value. The central point is that 'Moral culture is impossible except in a world which is itself informed with a moral intention' (p. 313). The main addition which chapter ix. makes to this conclusion is to give it a definitely religious turn: "The highest level of 'reflective' consciousness is neither Art nor Life, neither aesthetic nor organic purpose, but Religion—a type of Science which is neither dependent for its expression on artistic symbols nor equipped with the methods of scientific observation, but which is as articulate as

artistic expression and as certain in its conclusions as anything in Science" (p. 332). Reflexion is interestingly described as 'the emotional but reasonable apprehension of what is real' (p. 333)—and this very phrase perhaps illustrates best in what direction Dr. MacMillan has moved away from Kant's use of the term. And thus the book closes with a plea for the recognition of 'the experiences of the distinctively spiritual life' (p. 335), for a 'science of spiritual psychoses' (p. 338), which is to prepare the way for 'that final stage of culture of which Æsthetic is the symbolic expression and of which Ethical Teleology is the progressive realisation' (*ibid.*). This spiritual mode of experience ('empathy' in Dr. MacMillan's sense) is not to be confused with Mysticism (p. 335), nor does it need contact with sensation (p. 341), nor is it to be tested by merely logical criteria (pp. 344, 345), for it is 'more than intellectual,' assimilating intelligence as one of its elements. 'The Intuitive Understanding is within us; for . . . the nature of the ultimate Ground of existence and the nature of the human mind are of the same character, namely, purposive reality without a purpose, or indeterminate coherence' (p. 346). Every reader, I think, must settle for himself whether this is an adequate characterisation of the import of religious experience.

This survey and these quotations may serve to show the scope and interest of Dr. MacMillan's argument. There are, however, some faults which evoke the reader's criticism and thus diminish his enjoyment of the book.

To begin with, the "Analysis of Contents" (pp. xi-xxv) does not always follow the actual argument of the text as closely as it should. The worst example I have noticed is to be found in the analysis of chapter ii. (p. xiii) where we read: 'Feeling mediates between Cognition and Conation: in modern terms, Feeling is the consequent of Cognition (modification in the sensory-continuum) and the precedent to Conation or Desire (modification in the motor-continuum); if experience be regarded as a kinæsthetic-continuum, Feeling will be the *self-consciousness of experience*'. I have in vain searched the text for any explanation of this passage. I should challenge, so far as I understand it, the identification of Cognition with modification in the sensory-continuum, and still more the identification of Conation with Desire (which is a special form of it) and of either with modification in the motor-continuum. And whatever these phrases may mean, they leave the description of Feeling as 'the self-consciousness of experience' quite meaningless for me—as meaningless as the later description of Judgment as 'the self-consciousness of Cognition' (*ibid.*). Is the phrase perhaps only an alternative for the description (p. xv) of pleasure and pain as 'the *apperception* of all sensation'? But I am not sure what that means either, and in any case I should like to know what Dr. MacMillan's authority is for

using the term 'apperception' which has a definite meaning in Psychology, in this context.

Again, Dr. MacMillan's interpretation of Kant is not always quite accurate. I will add a few instances to those already given above. I should question the justice of the description, on page 8, of Kant's conception of Reason as 'fundamentally moral' and as consisting in 'the apprehension of truth in the practical decisions of the will'. Again, if Dr. MacMillan will reconsider Kant's arguments for the *a priori* character of space as a form of perception, he will, I think, see that his statement on page 13 does not reproduce Kant's 'chief argument' fully, and that there is nothing in that argument to justify his gloss that a sensation would, but for the presence of space, be 'nothing more than a subjective feeling or idea'. Further, is it not rather late in the day to speak of the problem that 'an idea in my head should indicate an object outside of me' (p. 24)? But most of all, perhaps, I should quarrel with Dr. MacMillan's discussion of Kant's Schematism. I fail to see the point of the comparison between Kant's Schemata and Dr. Stout's doctrine of Implicit Apprehension (p. 116). Again I have been baffled, on page 117, by the discussion of the relation of the Schemata to time, perhaps because I do not understand the phrases that Kant's Schemata are 'time-implications,' and that a Schema 'is not itself a process of consciousness but the governing consciousness of a process'. The passage from Kant, which Dr. MacMillan criticises at the bottom of page 118, appears to me capable of explanation, provided one does not, as Dr. MacMillan does, identify an 'empirical conception' with an 'image,' and speak of 'a mathematical category (*sic*), such as the pure conception of a circle' (p. 119). Such things confirm the misgivings aroused by such remarks as 'it is not really important what he [Kant] says' (p. 83). And what can be meant by calling Kant's theory of causality a *pons asinorum* (p. 128)?

Some difficulty, too, is caused by Dr. MacMillan's very loose way of handling technical terms, the exact meaning of which is never defined, and which appear to be used with different meanings in different passages. One example will suffice. Chapter viii. opens with these sentences, in which I italicise the words which seem to bear out my criticism: 'the *discursive* method of our *thought* does not disable us from apprehending living Nature. On the contrary, our *Understanding* with its modicum of *intuition* is peculiarly fitted for assimilating this plane of *perception*' (p. 292).

And, lastly, there are a great many *obiter dicta* which are highly questionable. It would *e.g.* take a good deal more argument than Dr. MacMillan offers to establish his view that the relation of Ideas to Particulars, in Plato's 'earlier view,' is 'causal' (p. 18). Several curious examples may be found in the following passage:—

'His [Kant's] position is that finite existence is for a self but

Reality for itself, or in Mr. Bradley's phrase, that Reality is experience. The only difference is that what Kant conceives as a higher immediacy in the analytic consciousness of Freedom, Mr. Bradley conceives as a lower immediacy in Sentience. The former is a subject which is its own object, the latter is an object which is its own subject. But, on their own admission, both these realities are ideal limits which have nothing to do with experience. Kant admits that it is absolutely impossible to procure a single case in experience with complete certainty, in which the maxim of an act, ostensibly done for duty's sake, has rested solely on moral grounds and on the idea of duty. Mr. Bradley, again, cannot find a single piece of experience which is not vitiated by relation to self, and consequently swollen with a merely ideal content like a face stung by a bee; just as Kant's consciousness of Freedom transcends, Mr. Bradley's object which is its own subject falls below, the margin of experience, and then it becomes a lost quantity. Mr. Bradley desiderates a quiet encounter with a fact outside of experience where he may shun publicity and the exaggerated reports of the upper world:—

"Foliis tantum ne carmina manda,
Ne turbata volent, rapidis ludibria ventis".

One is reminded of the tramp who remarked on being convicted of drunkenness, that he must have had a glorious time of it last night judging from what the policeman told the magistrate' (pp. 301-302).

It is sufficiently daring to suggest that Mr. Bradley's 'Reality is Experience' means that Reality 'exists for itself'—the sense, I suppose, being that it is self-conscious. If that is the meaning, it appears to me flatly to contradict the phrase in the next sentence about 'lower immediacy of Sentience'. And whatever be the meaning, I can attach none to the characterisation of Mr. Bradley's Reality as an 'object which is its own subject'. Nor am I aware of any passage in Mr. Bradley's writings which would justify the statement that for him every single piece of experience is 'vitiated by relation to Self'. Finally, I fear, I should need to practise psycho-analysis on Dr. MacMillan to discover the relevance of the anecdote, the quotation, and the statements about 'quiet encounter' and 'exaggerated reports' to each other and to Mr. Bradley's philosophy. I should be hard put to it, too, had I to enumerate all the senses in which 'experience' seems to be used in these few lines. And as for the 'face stung by a bee,' its luridness is surpassed only by the earlier remark (p. 12) that 'the initial feeling of unity, with which the Understanding sets out in constructing experience, appears in its final form as the distended bladder of its own enthusiasm, which at a touch may explode into vacuity'.

☞ But the book is too good to be judged by occasional passages

like this. Especially when expounding his own convictions Dr. MacMillan writes both simply and luminously. The following passage may serve as an example:—

‘For the same reason, I do not think that obligation loses its meaning even for the divine mind. The existence of moral evil would be a hopeless enigma unless it had its ultimate ground in the nature of God. As Theætetus said to the Stranger, this may seem to be a “terrible admission”. But if we say that obligation is confined to the finite mind, we are positing something which God does not understand, and therefore something by which the absolute nature of His being is limited. To be absolute the nature of God must contain the element of finitude, and in such a way that His finite nature shall not be regarded as evanescent appearance but as a permanent feature of His existence. This is the truth expressed in the Christian doctrine, that the Son retains His humanity in His state of exaltation. It would be impossible for man to sin unless the possibility were present to the mind of God. When we say with Plato that God cannot possibly do evil, we mean that it is His nature to be good, and we do not express anything different in the alternative statement that He is good because He wills to be good. But the simple statement that He is good just because it is His nature, altogether neglects the element of striving in the life of God. The goodness of God would mean nothing to us unless it were possible for Him to be otherwise. And if the nature of God is such that this contingency shall never happen, it is because the necessity to be good is maintained by continuous exercise of His self-hood’ (p. 315).

This is a very interesting view, and it is finely expressed. It shows Dr. MacMillan at his best, and in the final chapters he is mostly at his best. That is why I began by saying that we should enjoy his book most if we could read it from the end backwards.

R. F. ALFRED HOERNLÉ.

La Notion d'Expérience d'après William James. By HENRI REVERDIN, docteur en philosophie. Geneva and Bâle: Georg et Cie., 1913. Pp. xxii, 221.

M. REVERDIN seeks to penetrate to the central meaning of James's philosophy by elucidating the place held therein by the notion of experience. It is especially the new turn given to the philosophical study of religion by the *Varieties of Religious Experience* that has engaged him in this task (p. xi). The author's knowledge of James's writings—articles as well as books—is very complete; and his work is so carefully done, and is so free from the spirit of contention, that

it would be strange indeed if there were nothing to be learnt from it. Indirectly, indeed, there is much to be learnt from it; but the direct outcome of M. Reverdin's labours is rather disappointing, for he has avowedly (p. xiii f.) failed to extract any homogeneous body of doctrine from James's writings. He has, however, failed not merely to compress James's philosophy into a neat verbal tabloid which can be swallowed at a gulp—for this it was surely unreasonable to expect. It is a much more serious failure not to have seen that the one thing which gives coherence to James's philosophy as a whole is its pragmatism. This is neither to say that James, alone among philosophers, is entirely free from inconsistencies and obscurities, nor that his views never underwent any change, nor that they are incapable of further improvement. It is merely to insist that James never lost sight of the immanent teleology of the human spirit, and always understood that to treat such purposiveness as 'mere appearance' is simply to set man *at cross purposes* with himself. This demands the thorough substitution of a functional, for a structural, treatment of every problem.

M. Reverdin seems too much under the dominion of the ancient categories of the Locke *v.* Leibnitz controversy fully to grasp this transformation, or to perceive that the notion of experience must be as radically transformed as the old conception of empiricism. He will not quite give up the idea that empiricism must be the theory of the *tabula rasa*; and though James has ousted mere passivity from experience, he still seeks to fasten on empiricism itself that discarded ideal. "Radical empiricism (and this appears to me inherent in the logic of empiricism) seeks to describe and not to explain experience. How could one admit any 'principle' which should explain it? Naught but experience has the freedom of the city" (p. 118). Nor has he quite realised that James, while sharply opposing rationalism to empiricism, sets up no such fundamental opposition between reason and experience. For to discredit rationalism is not necessarily to disparage reason. True it is that the refusal to allow rationalism to beg the question by misusing the word 'reason,' deprives rationalism of its chief means of livelihood. But M. Reverdin holds no brief for rationalism; it is a pity therefore that the intellectualistic conception of empiricism as opposing sense to reason should receive his sanction. "It matters not," he says, "whether our mind and the forms into which it fits the real are the only conditions which could be realised for every possible experience, or whether they might have assumed some other shape and laid hold of experience differently. Knowledge bears the impress of this mind, and facts do not register themselves on a *tabula rasa*. The '*nisi intellectus ipse*' will always remain the answer to empiricism, in whatever guise it may be sought to revive it" (p. 195).

Yet M. Reverdin sometimes comes very near to the essential spirit of James, as when he says that "the psychological character of his

thought and writings forms as it were the mortar which holds the stones of the edifice together" (p. xix). And again: "In my view James is never read with more interest and profit than when the psychologist of genius joins hands with the clear-sighted, vivacious and profound moralist" (pp. 169-170). These *aperçus* are, however, neglected in his own exposition. Despite his special interest in the *Varieties of Religious Experience*, his book is almost entirely concerned with pure metaphysics. Nowhere do we find any discussion of what is, after all, the central insight of James's philosophy. It is only mentioned, baldly and without comment, in a footnote (p. 104): "What James calls the 'conceiving or theorising faculty' is, according to him 'a transformer of the world of our impressions into a totally different world,—the world of our conception; and the transformation is effected in the interests of our volitional nature, and for no other purpose whatsoever. Destroy the volitional nature, *the definite subjective purposes, preferences, fondnesses for certain effects, forms, orders*, and not the slightest motive would remain for the brute order of our experience to be remodelled at all.'" ¹ Thus by showing that what had hitherto been regarded as the typically 'subjective' elements in experience are really the mainspring of 'objective' construction, James superseded the old absolute distinction between 'subjective' and 'objective,' the adequacy of which M. Reverdin simply takes for granted. ²

These defects in M. Reverdin's exposition are strongly marked in the first of his five chapters. In it he aims at showing that "when James at the outset of his career declares himself an adherent of empiricism, he means that reality in the widest sense is the real fact as opposed to possibilities; from this point of view whatever is contained in our universe is contingent; realisation is contingency" (p. xiv). Now this seems, and is, a highly promising point of departure for the study of James's philosophy. But, both in this chapter and his "Remarques Finales" (pp. 187-190), M. Reverdin represents James as seriously and primarily interested in the question of possibility under a form so purely abstract and metaphysical as to rob it of all human interest. He considers it almost wholly from the point of view of the 'ontological problem,' *i.e.*, the problem why anything should exist at all. He does not even draw attention to the fact that James insists that no philosopher, not even Hegel, has succeeded in establishing "a natural bridge between nonentity and *this particular datum*." ³

M. Reverdin is able to quote (pp. 16-17) James as saying that "the notion of non-entity may be called the parent of the philosophic craving in its subtlest and profoundest sense. Absolute existence is absolute mystery;" and that "the bottom of being is left logically opaque to us, as something which we simply come upon

¹ See *The Will to Believe*, p. 117. The italics are mine.

² Cf. pp. 185 f., 198, 212.

³ *The Will to Believe*, p. 72. Italics mine.

and find, and about which (if we wish to act) we should pause and wonder as little as possible. In this confession lies the lasting truth of Empiricism."¹ And again (p. 19): "Fact or being is 'contingent,' or matter of 'chance,' so far as our intellect is concerned".² Such passages, taken by themselves, might be interpreted either as meaning that the final contingency of reality is an *a priori* necessity of thought, or as meaning that empiricism is merely the practical refuge of a mind baulked in its legitimate craving for pure theoretic comprehension. Under either interpretation, the problem itself is legitimate, though the ambiguity of the solution is undoubtedly suspicious.

But is this what James really meant? The whole context plainly shows that James's real intention was to furnish, as blandly as possible, a *reductio ad absurdum* of the ideal of pure theoretic contemplation. It is our *active* nature, he is urging, that gives us the key to the proper interpretation of reality. This is already pretty strongly hinted in a passage on the genesis of the ontological problem: "Our mind is so wedded to the process of seeing an *other* beside every item of its experience, that when the notion of an absolute datum is presented to it, it goes through its usual procedure and remains pointing at the void beyond, as if in that lay further matter for contemplation. In short, it spins for itself the further positive consideration of a nonentity enveloping the being of its datum; and as that leads nowhere, back recoils the thought toward its datum again. But there is no natural bridge between nonentity and this particular datum, and the thought stands oscillating to and fro, wondering why was there anything but nonentity; why just this universal datum and not another? and finds no end, in wandering mazes lost."³

James's conclusion, which is strangely overlooked by M. Reverdin, is that the rationalistic conception of what constitutes the essence of rationality stands in urgent need of revision. After pointing out that "the peace of rationality may be sought through ecstasy when logic fails," James continues: "With this we seem to have considered the possibilities of purely theoretic rationality. But we saw at the outset that rationality meant only unimpeded mental function. Impediments that arise in the theoretic sphere might perhaps be avoided if the stream of mental action should leave that sphere betimes and pass into the practical. Let us therefore inquire what constitutes the feeling of rationality in its *practical*⁴ aspect. If thought is not to stand for ever pointing at the universe in wonder, if its movement is to be directed from the

¹ *MIND*, xiv. (1879), p. 342. The last sentence, to which M. Reverdin draws special attention, is significantly omitted in the essay on "The Sentiment of Rationality" as republished in *The Will to Believe* (see pp. 72-73).

² *Some Problems of Philosophy*, p. 45 n.

³ *Will to Believe*, pp. 71-72.

⁴ This is italicised in the original. The remaining italics are mine.

issueless channel of purely theoretic contemplation, let us ask *what conception of the universe will awaken active impulses capable of effecting this diversion.* A definition of the world which will give back to the mind the free motion which has been blocked in the purely contemplative path may so far make the world seem *rational* again. Well, of two conceptions equally fit to satisfy the logical demand, that one which awakens the active impulses, or satisfies other aesthetic demands better than the other, will be accounted *the more rational conception*, and will deservedly prevail."¹

In this way James brings out that the fundamental characteristic of a truly radical empiricism is to be found, not so much in some special theory of cognition taken *per se*—which M. Reverdin desiderates—as in the refusal to take cognition in abstraction from life. "Pretend what we may, the whole man within us is at work when we form our philosophical opinions."² Rationalism, then, is at best an *experiment* foredoomed to failure; and at its worst is a mere intellectual pretence. Its psychological impossibility is co-extensive with its logical failure. And what is this but to say that, for James at least, empiricism, in its opposition to the fiction of 'pure reason,' is the only *reasonable* theory of experience? It is not to be denied that James, adopting the language of his opponents, and imperfectly realising the danger of making verbal concessions to verbalists, not uncommonly appears to be attacking reason as such. But it is safe to say that the prime requisite for an intelligent appreciation of his position is the ability to discount this very superficial appearance. M. Reverdin does not commit this blunder in any crude form; but on the other hand he does not penetrate to the root of the misunderstanding.

This line of criticism might be pursued through the remainder of M. Reverdin's book. But that would be an ungrateful, as well as a lengthy, task. Despite the book's shortcomings, the fulness of its citations and its transparent sincerity entitle it to a place on the shelves of the serious student of James's philosophy. The comparative failure of so careful a study is perhaps best regarded as a testimony to the remarkable unconformity that James has produced in the philosophic tradition.

HOWARD V. KNOX.

¹ *The Will to Believe*, pp. 75-76. The remaining thirty-four pages of the essay are devoted to the amplification of this thesis.

² *Ibid.*, p. 92. Cf. *Some Problems*, etc., p. 35: "Rationalists prefer to deduce facts from principles. Empiricists prefer to explain principles as inductions from facts. Is thought for the sake of life? or is life for the sake of thought? Empiricism inclines to the former, rationalism to the latter branch of the alternative."

VII.—NEW BOOKS.

The Nature and Cognition of Space and Time. By Rev. JOHNSTON ESTEP WALTER. West Newton, Pa. : Johnston & Penney, 1914. Pp. 186.

Mr. Walter's general position is akin to the Realism of the Scottish Philosophy (a position whose strength it is very easy to overlook), which has received a restatement within recent years by Prof. S. S. Laurie, whose exceedingly acute writings, though they have given rise to some discussion in France, are almost unknown among ourselves. Mr. Walter is at his best when he simply launches out and tackles his problem without paying attention to what other thinkers have said. In these cases the argument is marked by a rugged strength which is very refreshing. When the author mentions other philosophers, he often displays a defective acquaintance with their views. Thus he says that "the followers of the Kantian thought" hold that space "is no true presentation of the real extension of the mind or of any object in the mind" (p. 14). This certainly suggests that "the followers of the Kantian thought" hold that the mind is extended and that objects are in the mind. Further, in dealing with the well-known antinomies with regard to the limits of space and time in Reid and Spencer (who is called by Mr. Walter "a close follower of Kant"), Mr. Walter does not seem to see that the antinomy in each case rests on a confusion due to the ambiguity of the term "imagine". "To imagine" may mean for Reid and Spencer either "to conceive" or "to form a mental image". It is impossible to form a mental image of unbounded space or endless time, but it is quite possible to conceive infinity of space and time.

Mr. Walter starts with what he calls the common-sense view of space—"Space is real empty room, illuminated or coloured, continuous, tridimensional, homogeneous, permanent, or [?] of vast but unknown extension" (p. 13). Mr. Walter's own doctrine is identical with this, except that he denies light or colour to be a property of space. For him light is "a phenomenal projection from the mind into space". What exactly this means Mr. Walter does not explain. Is light mental? Are the waves mental? This is what his words seem to imply (unless they indicate adherence to some one of the "emission" theories which Optics has long since abandoned), but it is a strange doctrine for a Realist. He also leaves quite vague what he means by "unknown extension". Does he mean that it is impossible to form a concept or impossible to form a percept of extension, or that though we can do either or both of these, we don't know how far extended extension is? It is probably in the last sense that Mr. Walter intends us to understand his statement. Some pages farther on he says that space is not entirely incomprehensible. We do know some space, *e.g.* the volume of space within the orbit of the earth. But such an argument really misses the point. All it says is that we know that within the orbit of the earth there is what we call space. It does not help us to say what space is. And that is the question. Clearly the space of which Mr. Walter speaks is perceptual space. But he draws no distinction between perceptual and conceptual space, and

applies results derived from an examination of what is perceptual space to what is conceptual space. He points out that we know space as far as the fixed stars, *i.e.* we perceive it—but that clearly does not justify us in making any statement with regard to all space, *e.g.* that it is homogeneous. The same confusion between perceptual space and conceptual space leads the author on the one hand to speak repeatedly of “parts” or “portions” of space, *e.g.* of those parts lying within the orbit of the moon, and on the other to insist on the indivisibility of space. In the former case he is thinking of perceptual space, and in the latter usually (but not always, *cf.* p. 32) of conceptual space. It is evident that though Mr. Walter is not aware of the confusion on which the contradiction rests he is aware of the contradiction. Thus if he finds it necessary to speak of parts of space when he is insisting that space is indivisible, he does not say “parts” but “volumes” of space. In general Mr. Walter uses terms very loosely. He regularly speaks of the parts of an indivisible whole, or of an indivisible unit.

On the question of the relation between space and extension Mr. Walter vacillates. He criticises the view which identifies them, and holds that while space means empty space, extension is “the attribute of substances by which they fill space” (p. 51). But apparently forgetting this definition, he later distinguishes “filled extension” from “empty extension”—an obvious absurdity if extension is “an attribute of substances”. In the end he is forced to identify space and extension, and thus his criticism of the view that space has no attributes breaks down, for the only attribute which he really tries to secure to it is extension, and this he has defined as an attribute not of space but of the things which fill it. (Mr. Walter also mentions tri-dimensionality as an attribute of space. But in view of the plausible suggestions that have been made regarding space of more than three dimensions, it seems rash to assert this dogmatically.) There is confusion also in Mr. Walter’s account of the relation of the human mind and space. He speaks repeatedly of the mind as extended, and yet holds that “there is a real duality between the human mind and space” (p. 61). On the other hand God is not extended, yet there is no duality between God and space. Again, space is entirely independent of man’s thought (p. 61) (a truly Realistic doctrine), but on the other hand “a thing is real for us because it is known” (p. 63) (a strange aberration from Realism). Sensations, Mr. Walter maintains, must themselves be extended, or we could form no idea of extension. Our first thought of time must be as long as the time thought of. The mind constructs the idea of space out of extended elements. Mr. Walter seems here to be at precisely the position of Augustine meditating on *mira quodam vis* of the mind which contains *tanta coeli terre maris spatia*.

Misprints or errors in proof-reading occur on pages 5, 7, 13, 26, 32, 47, 60, 82, 89, 127, 185. And a protest must be entered against such “originality” as Mr. Walter shows in his use of prepositions (within certain limits any one seems to do as well as any other), in his inversion of certain conventions, *e.g.* when he speaks of “Mr. Spencer” and “Bradley,” and in the use of such words as extensionless, unknowableness, illogicalness, knowledges (= cognitions), existenceless.

G. A. JOHNSTON.

The Human Soul and Its Relations with Other Spirits. By DOM ANSCAR VONTIER, Abbot of Buckfast. Herder. Pp. 368. 5s. net.

The atom is a great study, so is the ‘fixed star,’ so too is the human soul to all who believe that they have souls, which belief as a central doctrine

of Christianity was held by all the mediæval schoolmen. This work is not argumentative, but a presentation of the opinions of St. Thomas Aquinas, and his commentators, Cardinal Cajetan and Ferrarisenis, whom the author calls 'our masters' concerning the human soul. The 'other spirits' are the angels, whose existence is taken, not as provable by experience, or to be argued from the nature of things, but as a fact of faith. For the mode of union between soul and body there is here set forth the Aristotelian 'entelechy,' or 'form,' the only doctrine tolerable in the light of biology, at the same time a doctrine upon which the soul's immortality is more difficult to argue than upon the opposing Platonic position. Unlike Plato, 'our masters' do not undervalue the importance of sensory knowledge. So strongly indeed do they insist upon it that they have extreme difficulty in making out how a sheer intellectual being, a pure spirit, whether an angel or the disembodied spirit of a man, can apprehend anything of this sensible world. And this is their way out of the difficulty, by what the Abbot calls 'the Scholastic principle of Angelic cognition': 'A spirit comes into existence with the knowledge of all material, created things, and their laws and the result of the laws, *in infinitum*'. There might be a difficulty about the bad angels; but he goes on: 'The lost spirit is not deprived of this action of God on the created intellect. It is not grace, it is nature; and nature has not been diminished in the lost spirit. This is what our masters mean to express by saying that spirits receive their knowledge, not from the thing that is, but receive it direct from God' (p. 337).

A very large statement! the proof offered is that created matter, with its awful complexity, cannot be taken to transcend created mind. It transcends the human mind but is caught up by the angelic. The Abbot adds (p. 109): 'every human soul, the moment it is separated from the body, has a full and complete knowledge of the material Universe and its laws'.

The above is no statement of Catholic faith, but of philosophic opinion in the Middle Ages.

It is wonderful how voyagers on the sea of speculation, purposing no such termination to their voyage, are sucked into the maelstrom of Kantism. We are far from saying that this has been the fate of the Abbot of Buckfast. But when he claims for a spirit 'total freedom from the laws of space and time,' and says that 'a spirit not only moves freely within space, but he is absolutely superior to space, space is non-existent to him,' we are tempted anyhow to compare Kant's doctrine that Space and Time are forms of objective Nature, not in itself, but in its relations to the embodied human mind. Further to the same effect we read in the chapter on 'The Soul's Place in the Universe' that, alone of all spiritual beings, the human soul in its union with the body has and can have experimental knowledge of the physical Universe. Thus the glorious beauty of a forest in the July sunshine, as my eye sees it, is not seen by the angel at my side: it is my property, not his, even though his view of the scene be far superior to mine. A pregnant saying on the Relativity of Human Knowledge.

On 'spirit-penalty' the Abbot writes cautiously (p. 216): 'Every Catholic has to believe in the physical reality of material elements which are called Hell-fire. . . . A material thing, in opposition to a spiritual thing, has some share in making the spirit unhappy. Catholic belief does not go beyond this very simple concept. The mode in which the material element is afflictive and punitive for a purely spiritual being, is entirely a debatable matter among Catholic divines.' Would not the said divines unite in going one step farther, and insist that the pain caused to the unhappy spirit by this material environment, whatever it

be, is a pain most properly expressed in human language by the words 'fire' and 'burning'?

It will be seen that *The Human Soul* is a thoughtful and interesting work, declarative on the whole with fidelity of the grand conceptions of the mediæval Schoolmen. We hear nowadays much of Mind, but little enough of Soul. In words that remind us of Socrates's dying speech to his judges, the Abbot wistfully concludes:—

'And now, dear reader, who may have had patience to follow me so far, I must take leave of you; and, whosoever you are, I must remind you once more that, to say the least, the odds are a thousand to one, that there is in you something marvellously great, something which you cannot understand, something that is at the bottom of all your pure and noble aspirations, something that is the home of conscience and duty: it is your soul. May it be your life's task to save that soul of yours, because the loss of it could not but be great, as the soul is so great.'

Bergson for Beginners: A Summary of His Philosophy. With Introduction and Notes. By DARCY B. KITCHEN, M.A. Second Edition. George Allen & Co., 1914.

It is possible that the true reason of the extraordinary success of Bergson, and the widespread interest in his teaching, is due to the fact that he has expressed for us what we have all for a long time been more or less unconsciously feeling, and which we could not ourselves have expressed and perhaps would not have dared to express even if we could. If this is so there has happened in philosophy what has happened over and over again in human history—a leader has arisen to give expression to a revolution, and not till he has arisen have we realised that the time was ripe for change. Bergson stands for a new movement, a new direction, a new ideal in philosophy.

The result of this wide interest in Bergson is the rapid call for a second edition of Mr. Kitchen's *Bergson for Beginners*. It is a curious title, slightly misleading, and in a manner provoking. It seems to suggest the sort of school book, *Reading without Tears*, *Little Arthur's History of England*, *Play Grammar*, and such like, for which in our school days we felt such unbounded contempt. But this is quite wrong; Mr. Kitchen has not attempted to do anything of the kind. *Bergson for Beginners* is not Bergson written down for the nursery or the school-room. It is clear from the very interesting introduction which surveys the problem of modern philosophy and discusses in particular the views of Prof. Ward in *Naturalism and Agnosticism* and *The Realm of Ends*, that the "Beginners" for whom the author is writing are students well versed in philosophy and quite familiar with its classics. What he has done is to give a very succinct and clear summary of the argument in Bergson's principal works. Now no one surely begins a study of a great work by a study of a synopsis of it—he is to be pitted not congratulated if he does—but a synopsis is invaluable to the student who has studied the original. So it seems to us that this book is of very great value. It is a summary of Bergson's philosophy made with great care and very clear, but curiously disproportionate. Thus 110 pages are devoted to an analysis of the argument of *Time and Freewill*, while only thirty pages altogether deal with *Creative Evolution* and these only discuss the comparatively easy two first chapters; the great metaphysical doctrine of the third and fourth chapters is hardly touched upon.

The omission is noticed by M. Bergson himself in the letter which he has allowed to be published in the front of the author's preface and which

gives a valuable and important recommendation to this second edition. In this letter M. Bergson expresses the admiration, which all readers of the book will share, for the author's talent for exposition and reassures him in regard to his anxiety lest that exposition may have been "marred possibly by misunderstandings," adding that he, M. Bergson, has truly found no errors of interpretation. Probably Mr. Kitchen will be the first to acknowledge that the credit of this belongs rightly to M. Bergson himself rather than to any merit in his interpreter, for Bergson is of all philosophical writers the least easy to misunderstand.

It seems to us rather a pity that this second edition should have had added to it brief summaries of M. Bergson's own recent popular expositions or applications of his philosophy, such as the Huxley lecture and the Presidential address to the Society for Psychical Research. As Mr. Kitchen remarks on page 239, in his summary of the Bologna address, "Bergson's discussion does not lend itself to shortening". It is difficult to believe that any student can really want it. It would have been much better to have supplied the omission noted above and have given a good summary of the metaphysical argument in *Creative Evolution*.

In a note on page 248 a saying is attributed to the present reviewer which he does not recognise and which certainly is a curious distortion of anything he was minded to say. He suspects that he was giving expression to the same remarkable fact that the author so well brings out in this book, the fact that the fundamental principle of Bergson's philosophy is clearly enunciated in his first work and that his other books apply that principle to other and wider problems. This should not be twisted to mean that the principle is stereotyped and has itself undergone no development, much less that Bergson himself discovered his philosophy twenty-five years ago and has not changed an opinion since. But this is a trivial matter.

M. Bergson's description, printed on the wrapper, "It is a simplified survey, remarkably well done, of the whole of my works," is a recommendation we can thoroughly endorse.

H. W. C.

Prestige: A Psychological Analysis of Social Estimates. By LEWIS LEOPOLD. T. Fisher Unwin. 8vo. Pp. 352.

It is difficult to convey any accurate idea of the contents of this book within the compass of a short notice: for Mr. Leopold's subject, somewhat elusive and indefinite as it is, allows him to follow a considerable number of different investigations, any one of which would supply adequate matter for an extensive treatise. His book suffers from the lack of a definite plan, and in consequence his treatment of his subject is somewhat inconclusive and inconsecutive. But as the book is apparently designed rather to stimulate thought than to establish conclusions, the author's intentions may be achieved: for it undoubtedly contains a great deal of suggestive analysis of socio-psychological phenomena. But the combination of this protracted analysis in Parts I. and II., with, in Part III., miscellaneous illustration from social facts of the problems raised earlier, is calculated to repel any but the most indefatigable perusal;—and readers must be had if thought is to be stimulated.

Prestige, as a social fact, is part of that mysterious content of Society which is independent of the logical processes of individual minds. No social group of any kind, as Mr. Leopold points out, exists or ever has existed, where such absolute equality reigned that identical words or actions on the part of different individual members of the group produced

identical psychological consequences : and it is to the psychological factor which differentiates between the consequences that we give the name 'prestige'.

Obviously an analysis of this socio-psychological phenomenon, its genesis and influence in forming and controlling social estimates and in creating social values, would be both interesting and useful. Mr. Leopold discusses its psychological conditions and manifestations at length, and his analysis of its relations to the phenomena of self-consciousness and sub-consciousness, of will and purpose, is both searching and suggestive. But he seems never to arrive at a generalised concept of its social significance, and its place in the social order—indeed he seems deliberately to avoid *any* generalisations from his elaborate but rather disconnected analyses. The conditionality of the possessor or the recipient of prestige,—the difference between Prestige and Authority,—these matters he handles with discrimination and judgment. But the reader's reflection is not directed into a consistent and connected train of thought, for his attention is not held to a single and definite line of argument.

While the psychologist may find the book a mine of ideas capable of inspiring profitable investigation, the sociologist will be disappointed if he expects a connected account of Prestige as a social factor. In Part III.,—"Prestige as a Regulator of Social Conduct,"—Mr. Leopold aims, to use his own words, only at illustrating some of its manifestations in the various phases of social life and action, without proving any law. This renunciation of any attempt to generalise conclusions which would colligate the vast mass of phenomena which are surveyed under such headings as 'Prestige in Economic Life,' 'Prestige and Brute Force,' 'The Prestige of Intellect,' may disarm criticism : but it certainly makes the book less readable, and, we might add, less useful.

J. W.

The Algebra of Logic. L. COUTURAT. Authorised English translation by L. G. ROBINSON. Preface by P. E. B. Jourdain. Open Court Publishing Co. Pp. xiv, 98.

This is a translation of Couturat's well-known *L'Algebra de la Logique*. It is provided with some useful notes and with a preface by Mr. Jourdain. In the preface the relation between modern systems of symbolic logic and Leibniz's views is pointed out. The work of Frege, Peano, and Russell corresponds in the main to the Universal Characteristic, that of De Morgan, Boole, and Schröder to the Calculus Ratiocinator. Of course the two are always combined in various degrees ; and it is a particular merit of Russell's synthesis of Frege's and Peano's notations that it produces something that provides at once symbols for the entities discovered by Frege's penetrating analysis and a method of symbolic reasoning which can be used much more easily than Frege's rather cumbersome notation. Couturat's book falls definitely on the Calculus Ratiocinator side, *i.e.* it does not trouble very much about a philosophic analysis to discover the ultimate logical entities, but prefers to treat symbolic reasoning as an intrinsically interesting kind of algebra.

The notation used is practically that of Schröder. The present work does not deal with the logic of relations, but may rather be regarded as the fullest development of that comparatively small part of logic which is treated (very imperfectly) in the traditional doctrine of the syllogism. In the body of the book I do not consider that the distinction between a propositional-function and a proposition is very clearly shown ; it first

appear in the propositions which Russell denotes by $(\exists x), \phi x$ and $(x), \phi x$ which are given in Schröder's sum and product notation. But in the preface the distinction is quite clearly pointed out by Mr. Jourdain, and this gives the translation an advantage over the French original.

This work deals both with the calculus of classes and with that of the corresponding propositions. It deals with Boole's Problem, Venn's Problem, Jevons's Logical Machine, and the tedious but exhaustive method of Poretski, which bears a striking resemblance to some of the problems which Leibniz dealt with.

The translation is well done, and the work can safely be recommended as a good introduction to symbolic logic for students, and as supplying interesting occupation for those who enjoy dealing with symbols for their own sake.

C. D. BROAD.

The Psychology of Insanity. By BERNARD HART, M.D. (Lond.). Cambridge: At the University Press, 1912. ("Manuals of Science Series.")

This small volume of 176 pages is in every respect an admirable introduction to the study of Insanity. The writing is exact and clear; the standpoint is perfectly definite; the selection of points for exposition is obviously informed by the latest speculations. The purpose of these "Manuals of Science" is rather to furnish an orientation to the beginner than to discuss doctrines exhaustively, and this purpose the present volume effectively fulfils. After a very short history of Insanity, Dr. Hart details the "psychological conception of Insanity,"—guarding himself carefully against the need for justifying "the ultimate relation" of mind and brain. He explains the dissociation of consciousness, the nature of "complexes," now a favourite word in morbid psychology, and he gives such an account of "conflict" and "repression" as to make the further study of the Freud school easily intelligible and interesting. He has chapters on projection, the irrationality of the lunatic, phantasy and the significance of conflict. As a presentment of the concepts now dominant in morbid psychology, this compact volume deserves the attention of every student of Insanity; all the more in that the Author is careful to distinguish between fact and speculation.

W. L. M.

St. Columba: A Study of Social Inheritance and Spiritual Development. By VICTOR BRANFORD. With a frontispiece by John Duncan, A.R.S.A. Edinburgh: Patrick Geddes and Colleagues, Outlook Tower. Pp. 83.

Mr. Branford's essay is, in his own words, an attempt to reinterpret old and familiar phenomena in the phrasing of current science: and he makes the story of St. Columba a peg on which to hang some interesting elaborations of the socio-psychological theories of Le Play and Prof. Geddes. St. Columba he finds to be an admirable example of an occupational social type, the pastoral: and he traces in his missionary work the realisation of the ideals and inspirations which formed the warp and woof of his social inheritance as the scion of a pastoral people. Mr. Branford does not confine his attention to Columba alone: but analyses the whole psychology of sanctity from the sociological point of view. The essay is interesting and ingenious, if not always convincing: but it well repays perusal: while the format and typography of the booklet leave nothing to be desired. The proceeds of its sale are to be devoted to the movement for the erection in Edinburgh of a statue in commemoration of St. Columba.

J. W.

Ambidexterity and Mental Culture. By H. MACNAUGHTON-JONES, M.D., M.Ch., etc. Illustrated, London: Wm. Heinemann, 1914. Pp. 102.

This little book brings together a large amount of interesting material on ambidexterity. It is well illustrated by practical examples of writing, drawing, etc. The Montessori methods receive a chapter. Dalcroze's system of "Eurythmics" is also presented. "I anticipate a time when it will no longer be rare to find the two-handed man or woman worker equally proficient in execution with both hands. When this advance has been made, there will be a corresponding gain to the mental side of life. The alternating or synchronous action of the dual-sided brain, left and right sides equally co-operating with the associated arm and hand, and equally educated in their functional powers and uses, must have its psycho-physical influence on the individual" (p. 98). The little volume is a good introduction to an important subject.

W. L. M.

Sexual Ethics, A Study of Borderland Questions. By ROBERT MICHELS, Professor of Political Economy and Statistics at the University of Basle, etc. "Contemporary Science Series." London: The Walter Scott Publishing Co., 1914. Pp. xv, 296.

This is a new volume of the "Contemporary Science Series" edited by Mr. Haverlock Ellis. Prof. Michels's point of view is much the same as that already made familiar to us in the more elaborate works of Mr. Ellis. The present volume concentrates itself on current borderland questions. The discussion is direct, lucid and well documented. The author is well qualified both from his international connexions and special studies to deal with a subject so fundamental. The volume is a valuable contribution to the most difficult of all social questions.

W. L. M.

Mental Diseases, A Text-book of Psychiatry for Medical Students and Practitioners. By R. H. COLE, M.D. (Lond.), M.R.C.P., Physician for Mental Diseases to St. Mary's Hospital. London: University of London Press. 52 Illustrations and Plates. Pp. x, 343.

"In this volume," writes Dr. Cole, "I have endeavoured to delineate the salient features of our present knowledge of psychiatry in as concise a manner as possible." It may at once be said that the endeavour has succeeded. The book is well arranged; the composition is exact; the materials are carefully selected for their purpose; the theories are "up-to-date," and the illustrations both coloured and uncoloured are well produced. The book is at once compact and comprehensive.

W. L. M.

Diseases of the Nervous System—For the General Practitioner and Student. By ALFRED GORDON, A.M., M.D. (Paris), Late Associate in Nervous and Mental Diseases, Jefferson Medical College. Second Edition, revised and enlarged; with 169 Illustrations. London: H. K. Lewis, 1914. Pp. xiv, 618.

This well-arranged and well-printed text-book deserves the success indicated by this second edition. There are many minor additions.

Psycho-analysis receives effective recognition as a method of treatment. The book is among the best of the practical text-books.

W. L. M.

Our Eternity. By MAURICE MAETERLINCK. Translated by ALEXANDER TEIXEIRA DE MATTOS. London: Methuen & Co., 1913. Pp. 243.

This volume is an enlarged version of M. Maeterlinck's *Essay on Death*, incorporating his conclusions regarding Theosophical and Spiritualistic hypotheses. He leans towards the hypothesis of the continued existence of a modified or progressive consciousness. All is a matter of knowing how we propose to look at infinity; but we have to resign ourselves to living in the incomprehensible, and even to rejoice that we cannot go out of it, as otherwise we should have to curse the fate that had placed us in a universe proportionate to our intelligence. The translation is well done.

D. M.

La Philosophie et la Sociologie d'Alfred Fouillée; avec biographie, portrait et extraits inédits. Par AUGUSTIN GUYAU. 1 Volume in octavo. Paris: Felix Alcan, Editeur, 1913. Pp. xx, 242.

To make a comprehensive survey of a complete philosophic system within brief limits, even if the survey be restricted to the system's more important principles, is not easy: and to make it readable, even in a scientific way, is almost impossible. But M. Augustin Guyau has attained as nearly to success as the circumstances admitted in the filial but difficult task he set himself, to form a précis, as it were, of the teaching of Alfred Fouillée and his theory of "Idées-forces". Fouillée drew up for his grandson, when the latter was a student, a synopsis of the leading points in his own philosophy: and upon the synopsis, and on M. Guyau's own recollections of the philosopher's conversation, this work is based. For a closer acquaintance with the conception of the "Idée-force," the student must of course go to Fouillée's own published works: but M. Guyau's book supplies a clear account of the philosophic application Fouillée made of it, and its sociological and even cosmological elaboration.

Fouillée's philosophy, says M. Guyau, is a constructive and comparative one, destined to include and reconcile all philosophic ideas: but it is not mere eclecticism because it is based on a definite and regular rule of choice. Its purpose being to explain the reality of our own experiences, he finds that explanation in the reality—the creative reality—of the idea. Thus we have a synthetic method capable of reconciling the most contradictory results of the analysis of experience, and of forming a basis of a comprehensive and consistent philosophic system. For if we reconstruct with the greatest possible coherence contradictory laws, we can insert ideal middle terms between their contradictions, we can construct mental equivalents of their relation: and thereby arrive at a subjective reality which makes a satisfactory basis both for system of thought or method of conduct. We have, for instance, the metaphysical idea of liberty between Free Will and Determinism: and this middle term—this substitute or equivalent for reality, or "Idée-force"—may be analysed in its influence on the individual, society, the world, and judged accordingly.

The resemblance to the Pragmatic theory is obvious: but between the philosophy of the "Idées-forces" and Pragmatism, Fouillée claims an essential difference, based on what he considered the latter's uncritical acceptance of any subjective feeling or desire as a concomitant of ex-

periential reality. How far the distinction holds good would be interesting to discuss, but space does not admit of our noticing the point. We may however mention Fouillée's application of the "Idée-force" theory to one branch of Science, Sociology, as illustrating its advantages and disadvantages.

Here it certainly has an admirable field for the exercise of the conciliatory qualities claimed for it by its expositor. The sociological field has long been the battle-ground of opposing schools of thought—the thinkers who would explain its phenomena objectively as the results of physical influences, race, soil, climate, heredity, etc. : and those who seek a subjective interpretation in terms of human nature, utility, choices, ethical imperatives. If the "Idée-force" theory could reconcile these two extremes, and systematise the whole range of social phenomena as the results of a single agent or motive in social consciousness, such as Imitation in M. Tarde's Sociology, it would deserve all the credit that is claimed for it. But its success is at least equivocal. The "Idées-forces" in social consciousness are not easily to be classified as the results of a unique principle in human society.

Fouillée conceived them as the half-involuntary, half-conscious ideals and desires which are part of the individual's social inheritance, and which form the foundation of society's solidarity and of its collective consciousness. For example, he held that the continuous existence of any society, its solidarity in the widest sense of the word, depended on the idea of justice, of mutual reciprocity and obligation, not only to our own generation but to the past and the future. We are bound, by the implicit contract on which society rests and which we recognize and accept by our actions as citizens, to right the wrongs created by our forerunners' actions : and we hand down to posterity the duty of redressing, if necessary, by a reparative justice, the consequences of our own. The idea of justice is, then, one of the "working ideas" which has directed and influenced social evolution. The idea of justice has not only created the whole vast social machinery of law, but influences our social choices and actions at every turn.

A complete catalogue of "Idées-Forces," a study of their evolution and influence, and a classification of them in reference to a dominating principle of social consciousness, if there be such a principle, would be an original and useful contribution to theoretical Sociology. It is for future students of the subject to build upon the foundations laid by Fouillée : and its ultimate effect upon sociological theory can only be as yet a matter of conjecture. Still the Sociology of the "Idées-forces" already supplies us with an original and systematic way of regarding the data of social experience : and Fouillée's place among the French thinkers whose work is by far the most interesting and original part of modern social science is a distinguished one.

M. Guyau has, as we have said, discharged a difficult task with skill and considerable success. His work from its very nature makes succinct description, or even discussion, impossible : but it will doubtless realize its author's purpose—"à rendre accessible à tous la pensée du maître et en préparer l'étude à ceux qui, abordant les problèmes philosophiques, y rencontreront désormais le grand nom de Fouillée".

J. W.

L'Étude Expérimentale de l'Association des Idées dans les Maladies Mentales. By Drs. AUG. LEY and PAUL MENZERATH. Gand, 1911. Pp. 199.

This book is based on experiments upon thirty-six subjects suffering from various types of mental diseases. The authors found that many

symptoms and tendencies could be discovered by means of association experiments which could not have been found by any other method, and they testify especially to the value of the introspections of the subjects. These seem to be somewhat meagre, as one would expect, when compared with the introspections of normal persons, though some authorities claim that the introspections of the mentally afflicted are not necessarily any less *reliable* than those of healthy individuals.

The authors emphasise the fact that the lengthening of the association reaction time may be due to causes other than the existence of a "complex," e.g. to the rare employment of the stimulus word, to its abstract nature (adverbs, numbers, etc.) or to a mental state which one meets especially in some psychasthenic patients consisting of an exaggerated desire to give intelligent answers.

Complete forgetfulness of the reaction word was sometimes discovered immediately after the reaction, especially where the existence of a "complex" was suspected.

A brief summary of inferences follows the records of experiments on each patient, but there is little in the way of broad discussion of psychological theory. A bibliography is appended of one hundred and sixty-four articles and books bearing on the subject.

C. W. VALENTINE.

Les Maladies Sociales. By PAUL GAULTIER. Paris: Librairie Hachette et Cie, 1913. Pp. vi, 270.

This small volume deals with adolescent criminality, alcoholism, de-population, pornography, and suicide. The titles of these divisions of the volume are sufficient to indicate the substance. The author is profoundly impressed with the national danger of de-population, but finds ground of hope in the fact that the restriction of population is not biological, but voluntary. His remedies are on somewhat commonplace lines; but possibly, all real "remedies," if there be such for the given phenomena, must be commonplace. The book is excellently written and the references are more than sufficient to make it a genuine introduction to the study of all the problems named. In the discussion of "the plague of de-population," the standpoint is the contrary of that taken by Prof. Michels in *Sexual Ethics*.

W. L. M.

Über mathematisches Denken und den Begriff der aktuellen Form. Dr. LEONID GABRILOVITSCH. Berlin: Leonhard Simion. Pp. 92.

This little book deals with the relations of Logic and Mathematics. It has the rare merits, for a German philosophical work, of conciseness and clearness. Taking such work as Hilbert's on the foundations of geometry and Russell's and Whitehead's *Principia Mathematica* as texts, Dr. Gabrielovitsch seeks to determine precisely what is merely defined by postulates and what must actually be known in itself. Thus in Hilbert's work we have no need to have any notion of points or lines or planes except as things that are connected with each other in certain definite ways; and again the particular system of axioms which Hilbert lays down is not necessary. But of course all the reasoning about these things is conducted logically; and the question arises: How much in symbolic logic itself can be treated as merely defined by arbitrary (though consistent) axioms, and how much must be assumed to be actually known in itself? It is of course clear that both certain entities and certain laws of connexion will have to be known, and not merely arbitrarily defined, if symbolic logic itself (and therefore all the sciences that use it) is not to be wholly arbitrary.

In the present work Dr. Gabrilovitsch is concerned rather with entities than with laws. He enumerates several which must be known and not merely defined by postulates if logic is to proceed at all, and then he devotes himself to showing how such knowledge is possible. Thus he holds that before we can begin a symbolic calculus at all we must know what is meant by Identity, Difference, and Order. Unless we do this we shall not, for instance, understand what is meant by the same symbol standing throughout our reasonings for the same entity, or different symbols for different ones. And again we shall not, unless we already have a notion of order, understand the difference between $p)q$ and $q)p$, or see how, when these are significant, pq is nonsense.

He argues that the whole object of mathematical development is to replace qualitative concepts by relations, and that mathematical form is an order of contents, and not their existence or qualities. This is an important step in his argument and it seems to me weak. He takes qualities like circular, as abstracted from sensuous experience, and, comparing them with the mathematical definition of a circle by its equation, remarks that qualitative circularity is always vague because a matter of degree, whilst the mathematical definition is precise because it replaces qualities by relations which have no degree. And he concludes from this that the fundamental notions of mathematics cannot be reached by abstraction from instances of them in experience. To this one may answer (1) that some relations have degrees, (2) that it is not obvious that all qualities must be terms in continuous series as colours and sounds are, and (3) that, because some things that are abstracted from sensible experience are qualities, and some qualities are terms of continuous series, it does not follow that relations may not also be abstracted from sensible experience and that some of these may not be perfect by determinate. For instance, difference is a relation, and it certainly holds between terms in sensible experience—wherever else it may hold also; and it is not in the least vague, for the fact that I may judge two things to be exactly alike when really they are different does not mean that I am vague about the meaning of difference. Dr. Gabrilovitsch adds the argument that, if difference were a content like any other, I should have to experience not only a and b and their difference, but also the difference between a and its difference from b , and so on to infinity. But, in the first place, difference no doubt is not a content, *just like* different sensible things, yet the experience of different sensible things may be enough to direct our attention to it. And, when this is admitted, there seems no more need for me to go on to recognise all the infinite set of different differences that are connected with a and b than to recognise anything else in which I am not immediately interested. Moreover it is at least doubtful whether differences do differ; and, if they do not, there is no chance of an infinite regress. There is a and b and difference; and all the possible judgments are ' a differs from b ,' ' a differs from difference' and ' b differs from difference'; whilst the difference of a from b is identical with the differences of a and of b from difference.

However, Dr. Gabrilovitsch considers himself forced to account for the origin of our knowledge of difference otherwise than by reflexion on the differences in our experience. He introduces the notion here of Actual Form. The point is that we have a mass of sensible experience which we can go through discursively by a mental act. But at no moment can our discursive act bring the whole of it before us; we are always conscious of the presence of an X to which this act has not as yet applied itself. Now we learn about identity and difference in the distinction between that part to which the act has applied and the remaining X . The former is determinate, *logically* one, and self-identical; and it is different from the remaining X . Also we thus learn of identity and difference as

universal because the limits of the determinate and the X are always shifting, and we see that such and such a proportion between them is irrelevant to the self-identity of the one and its difference from the other. I am quite prepared to accept much that Dr. Gabrilovitsch says here; but I only see in it a special example which may lead us to recognise identity and difference. I do not see that they must be recognised in this way, nor why an act of inspection directed to two determinate objects in the not-X should not equally well make us aware of difference. Nor does Dr. Gabrilovitsch's theory seem to account as well as he thinks for our knowledge of the universality of identity and difference. How will the fact that the X and the not-X are certainly shifting their boundaries show that difference ever holds between two determinate parts of the not-X, and not merely between X and not-X as wholes?

Dr. Gabrilovitsch has some good criticisms on the Marburg school. He points out that, unless the sensuous manifold has some definite constitution of its own, it is inexplicable how relations which are purely the products of thought can apply to some parts of it and not to others. He then goes on to argue that logic really presupposes a knowledge of the meaning of number as well as of identity and difference. You must know what you mean, *e.g.*, by treating a complicated expression in brackets as a unity. But he admits a difference between this logical unity and the 1 of arithmetic. On his view the number series arises by applying the actual form to itself. First we have not-X opposed to X, *i.e.*, one (in the logical sense) opposed to another. But then we can consider this application with its two sides as a content and oppose to it another X. This content will be a not-X and a logical unity. But it is now recognised as being a unity with two terms, and it itself is the number 2, while the parts are arithmetical 1's. He compares this with Jevons's theory of numbers, which make 2 a difference, and 3 a difference of two differences, and so on. It seems to me that both theories err by giving as the *number itself* something that *has* the number.

By this procedure Dr. Gabrilovitsch produces the number series, and is able to see that it has no last term. And, by accepting Helmholtz's theory that arithmetical operations are applications of counting to the number series itself, whilst rejecting the view that the series itself is merely arbitrary, he professes to prove the principle of Mathematical Induction. The book is an interesting one and contains many acute criticisms; but I doubt if it makes out its point.

C. D. BROAD.

Untersuchungen zur Logik der Gegenwart. Von Prof. Dr. WILHELM KOPPELMANN, Privatdozent a.d. Westphäl. Wilhelmsuniversität. I. Teil. Lehre vom Denken u. Erkennen. Berlin: Verlag von Reuter u. Reichard, 1913. Pp. v, 278. M. 6.50.

The present volume is a first part, dealing with the principles of thought and cognition, to be followed by a second part treating of formal logic.

Erkenntnis-lehre is described as asking the question: "To what conditions is cognition subject, and what are its limits?" Formal Logic is the theory of the conditions which govern the linguistic interchange of thought. The two together constitute Logic as the science of correct thinking. To think is to set in order (*ordnen*).

Here we have almost wholly a study in Erkenntnis-theorie; and it has interest as an extremely characteristic example of this attitude. The author intentionally attaches himself to the movement which began with Locke, and culminated in Kant. Only the last of his eight chapters discusses the logic of inference, refuting Mill's account of the ground of Induction at a length now surely quite unnecessary, and distinguishing

the forms of Induction corresponding to the different sciences. The only novelty, I think, lies in attaching physical experiment to the doctrine of the continuum, by pointing out that in correlating, say, heat and expansion, you have not a single case, but already an infinity of cases. The theory of Deduction, stated in four or five pages, reduces it to two forms of inference, one of which applies to a case the condition which every judgment is construed as laying down, and so concludes to the conditioned; the other excludes alternatives from a limited list and accepts the unexcluded. "Formal" Logic contains only various expressions of these thought-processes, whose variety is due to the defects of language. The seventh chapter discusses the "modality of cognition" (not of judgment) and is mainly concerned with the distinction between sciences which do and which do not admit of ideal completion. So far as I can see all the great sciences come under the latter head, and none under the former but the establishment of the shapes of spatial objects.

But the bulk of the volume (chaps. iii.-vi. inclusive) is occupied by the author's construction of a *a priori* law, according to his Kantian view that cognition is possible only through the conformity of the object to our knowledge, and extends only to "*our* reality". This conception of *our* reality, sharply contrasted with any reality which might be *an sich*, and *ohne unser zutun*, is I think the most remarkable thing in the book. Whatever seems to the author absurd or unthinkable is relegated to a possible *an sich*, the object of a possible Metaphysic—I am not sure whether he really thinks there could be such a science.

He has pointed out, in his first chapter, the failure of other forms of *Erkenntniss-theorie* to show any ground why reality, considered as existing *ohne unser zutun*, should take any account of the necessities of our thought. Empiricism, Rationalism, Biologism, all make shipwreck on this rock. But his own position, which provides our *zutun* in the conditions of our cognition, surely partakes in the common failure of *Erkenntniss-theorie*. To deny that thought can know things as they are, is to deny the essential nature of thought. To make a bridge by saying that things conform to thought, generating an anthropological reality (p. 217), is merely to mix or colour the reality with the psychological features of a certain animal species, and is none the less to deny to thought its true and direct function of knowing its object. It is the vice which *Erkenntniss-theorie* cannot escape, when its question is stated as above.

But in execution, of course, the failure may be mitigated. Under the head of conditions of *our* thought and of *our* reality, due to *our zutun*, one may find a quite tolerable analysis of the thinkable characters of a universe. The chapters to which I referred (iii.-vi.) are clearly and methodically written, and make a fair show of deducing from the requirements of our knowledge, and especially from the possibilities of the construction of reality,¹ most of the principal laws which govern scientific method—the laws of number and measurement, of space and time, including causation, and the presumptions of teleology. It is clear, I think, that the appeal is frequently to what on the whole is thinkable, and the limitation to *our* reality, though constantly insisted on, becomes altogether arbitrary. For instance, a thing is exactly like, or the same (*gleich not ähnlich*) when it has the same qualities under the same conditions. This is simply and solely because *we* can only recognise same-

¹ The author lays stress on a distinction between the necessity of thought, and the necessity of our constructive science, and appeals to the latter, as belonging to *our* reality, while professing indifference to the former. I do not see how the distinction can hold. The law of causation is for him such a law of construction; but his proof of it (p. 165) is an argument appealing to what is thinkable.

ness by the sameness of perceptible qualities. If we speak of the same (*gleich* "in itself," we cannot possibly lay down any rules for its behaviour. It might be like Proteus, changing without a change of conditions. (I do not agree that Proteus did so; the failure of previous struggles was a new condition.) This is "a proposition which holds *a priori* for the whole province of reality" (p. 75). But it "says nothing at all of identity and difference 'an sich'". Is not the distinction futile?

The author holds unusual views in many ways. He supports Croce against Logistic; he casts doubt on the whole evolutionary theory of descent (not merely on Natural Selection); he assumes an unthought datum of perception (against the Marburg neo-Kantians); he denies the possibility of a *SelbstZweck* on the ground that action directed to it must be action without an interest; he seems to favour some sort of voluntary creation as at the root of the original physical universe (p. 197); he attacks Husserl for Psychologism, because he calls "evidenz" an *Erlebniss*; and his views of deductive inference we have already noted. He deals at some length with matters of scientific theory, for example with the problem of a single time-order in the universe, the difficulties of which he considers merely practical and not ultimate. The book is interesting, and something of an oddity.

BERNARD BOSANQUET.

Ursache und Bedingung: Widerlegung des Konditionalismus und Aufbau der Kausalitätslehre auf der Mechanik. GUSTAV HEIM. J. A. Barth. Pp. 62.

This pamphlet criticises the views of the physiologists Verworn and v. Hansemann on Causation. Verworn wished to replace the notion of cause by that of condition. He argues that all conditions are equally important and that they are not mutually substitutable. The author replies that importance is quantitative and necessity not; and that it is impossible to argue that, because all conditions are necessary, they are all equally important. And he gives examples where substitution seems possible. His arguments here seem to me sound; it is clear that, if you take a limited and abstract effect (as you must to make any use of causal laws), it may have various conditions.

Heim admits the difficulty of distinguishing between cause and conditions; but he undertakes to do it. He takes the case of a billiard-ball hit with a cue and concludes that the genuine cause is the moving arm and cue, because these produce all the further changes. Friction, elasticity, etc., are conditions which determine the subsequent effects produced by the moving ball, whilst there are of course preconditions and causes of the motion of the arm. I do not see that Heim makes out his case here. In the first place the energy in the blow (in the mechanical sense) does not determine the direction. Again the path of the ball surely depends also on the question whether the table is level or not. Heim would probably call this a subsequent cause that acts on the ball; but then there is no interval between its action and that of the cue, and Heim fails to notice that a causal process cannot be divided up into contiguous events, owing to its continuity. The essence of the distinction between the blow and the other conditions seems to me to be this. No combination of the other conditions produces any kind of motion without a blow, but a blow nearly always produces some motion however the other conditions be filled in. Now the other conditions are often fulfilled apart from a blow, but a blow never exists without some of the other conditions being filled in somehow. Thus we come to take the blow as more directly concerned with the motion than the other conditions. Heim approaches this

position in his account of why he calls the tubercle-bacillus the cause of consumption, and such factors as bad ventilation only conditions.

The author holds that the same cause will always have qualitatively the same effect, whatever may be the conditions; and that this is a distinction between causes and conditions. This constancy is certainly the essence of any law, causal or otherwise. What he should further have noticed is that the notion of same cause and same effect involves that both are abstract; the further filling in of the detail of the effect is due to a further filling in (itself abstract) of the detail of the cause; and the relations between these two sets of abstract details, taken by pairs, are themselves unconditional in a true causal explanation. Thus no ultimate distinction between cause and condition is reached from these considerations.

He rejects the view that the cause is quantitatively equal to the effect, but holds that it is proportional to it. This he is able to do, he thinks, because he takes, in mechanical examples, a force as cause and the work done as effect. He further uses the word *work* for all changes that are effects. To this argument there are two objections. (1) *Unless* you can reduce all interactions to pure mechanics it is not clear what will be the measure of work in the wider sense in which he uses the term. (2) There is a difficulty even in mechanics. He rests his assertion on the equation $W = Fs$. But suppose the force is variable. Then we only have $dW = Fds$. He must then either admit infinitesimal causes and effects, or, if he takes the integrated form $W = \int Fds$, give up his rule of proportionality as universal, even in mechanical transactions. All attempts to discover a uniform quantitative relation between cause and effect in general seem to me in fact to be quite hopeless.

Heim is concerned to show that a cause is never a change but is a thing. He makes some good points against Wundt's opposite view. What I think is true is that a cause is usually taken to be a thing in a certain state. We say indeed that a stone breaks a window, but we mean that a moving stone breaks it. And we should hardly say that the motion of the stone breaks the window. Finally he congratulates himself on the absence from his definition of cause of 'mystical or metaphysical elements'. Since an essential element in his definition is that of 'production' of work, and since this obscure notion is nowhere explained, such self-congratulation seems premature.

This little book, as I have tried to show, is somewhat of an amateur effort; there are a great many subtle distinctions needed in dealing with Causality which the author has not noticed; and, even when they are recognised, great difficulties remain. But it is distinctly interesting, and the examples from medical facts—so unusual in philosophic writings—give it a certain freshness.

C. D. BROAD.

"Sitzungsberichte der Kais. Akademie der Wissenschaften in Wien Philosophisch-Historische Klasse," 170 Band, 10 Abhandlung. *Andreas Fricius Modrevius. Ein Beitrag zur Geschichte der Staats- und Völkerrechtstheorien.* Von WLADISLAUS MALINIÄK, Juris publici doctor. (Vorgelegt in der Sitzung am 13. März, 1912.) Wien: In Kommission bei Alfred Hölder, k.u.k. Hof- und Universitäts-Buchhändler, Buchhändler der kaiserlichen Akademie der Wissenschaften. 1913. Pp. 200.

Problems of concrete politics peculiar to the time and place are responsible for so much in the political speculation of Polish writers in the sixteenth century and earlier, that although accessible in Latin it has been largely ignored or misunderstood. It is however this intimacy of its relation

to actual, if evanescent, issues that seems likely to lead to its rehabilitation. The *de Republica Emendanda* of the publicist, also distinguished as a theologian, whose position in the history of ideas the patriotism of Dr. Maliniak has undertaken to determine, is apparently the most significant of the endeavours of Polish thinkers to theorise in the midst of constitutional struggle. It appeared in 1551, was as Dr. Maliniak notes, notably free from scholastic influences, and went straight to Aristotle and to Cicero, though adopting little of the teleology of nature which characterises these writers, and regarding the state more individualistically. The more striking differences from the *Politics* and Cicero are, it would seem, the result of historical conditions. On the forms of constitution, on slavery, on war and—most modern of thoughts—arbitration, there is obvious divergence from the models. The question of the rights of the different orders is a living one for Modrevius. In maintaining equality of all before the law, specially in regard to the death penalty, Modrevius has been held to have anticipated the doctrine of the revolution. But Dr. Maliniak is doubtless right in maintaining that there is no attack on the existing demarcations of caste or class. Modrevius's views of reform are conditioned by his period and his *provenance*. The 'execution' party do not appear to have contemplated popular legislative activity, and Modrevius is no exception. That, like Laski and others, he proposed relief from the burden of taxation by eliminating exemptions, and redress from oppressions by the impartial administration of law, stamps him as a reformer, though on conservative lines. That he reflected on the underlying principles with a sufficient independence of authority to use the political theory of Aristotle, little favoured by the schoolmen by the way, without parroting it, gives him some status as a thinker. The Protestant reformation in Poland was so discreditable in some of its motives and activities that it is pleasant by way of contrast to turn to the practical philosophy of this always sincere, if not always very original, advocate of progress.

HERBERT W. BLUNT.

Der Pragmatismus von James und Schiller, nebst Exkursen über Weltanschauung und über die Hypothese. By Dr. WERNER BLOCH. Leipzig: Verlag von Johann Ambrosius Barth, 1913. Pp. viii, 107. Price, Marks 3.

This is a very pretentious, but quite superficial work, calculated to shake any one's faith in the tradition of *deutsche Gründlichkeit*. Its spirit is indicated by its approval of Schinz's declaration that Pragmatism is one of those theories which are outside the limits of philosophic toleration, and "must be strangled in its cradle". The difficulty about this policy would seem to be that the intolerable infant shows a disconcerting tendency itself to play the Hercules.

Dr. Bloch's equipment for his self-imposed task may be gauged by his complaint that he had to search in out-of-the-way corners for the weapons with which to conduct his infanticidal crusade ("das Material aus allen Ecken und Enden mühsam heraus-suchen"). His anti-Herculean labours do not appear to have been excessive or even adequate. His very meagre bibliography, his neglect of the controversial literature in *MIND*, and his very imperfect acquaintance with even the primary writings of the authors he attacks, consort ill with his declared intention of settling this little matter of Pragmatism "once and for all" (p. vi). As a fact, he seems to have read of his authors nothing but *Pragmatismus* and *Humanismus* in the German translations, and even these not very thoroughly. The

fountain-head of Pragmatism, viz., James's *Principles of Psychology*, he treats as non-existent. With fine impartiality he also completely ignores the writings of the English Idealists, which have created the philosophic situation with which the pragmatists have had to deal.

The almost comical self-confidence which accompanies his ignorance warrants a surmise that Dr. Bloch must be a young man. If so, he may live to realise and correct his deficiencies, and to produce work more worthy of serious notice. In making a fresh start he may be recommended to begin with Mr. D. L. Murray's little *Pragmatism*, if he finds the exhaustive history of the whole controversy in Dr. T. B. Muller's *Kennisleer van het Anglo-Amerikaansch Pragmatisme* too serious an undertaking. And it may be added that, if he intends to be thorough, he must not again dismiss as unessential (cf. p. 104) the relations of Indeterminism and Pragmatism.

H. V. K.

Sul Pragmatismo. Saggi e Ricerche. By GIOVANNI PAPINI. Milano: Libreria editrice Milanese, 1913. Pp. xii, 163.

It is to be feared that this volume will come as a disappointment to those who have looked to Signor Papini to fulfil the promise of writing a systematic account of Pragmatism which he had announced so long ago as 1906. For not only was no such account at that time in existence, and would all parties have agreed that an exposition of Pragmatism by a writer of the purest Latin race and free from all taint of Anglo-Saxonism would be most interesting, but it would have been also specially instructive to see how far Latin logicity would carry the doctrine in the hands of one who had not shrunk from proclaiming the *Uomo-Dio* as the culmination of the remaking of reality by the action of human intelligence. But this great opportunity Signor Papini appears to have let slip; for though the second motive for welcoming what he has to say still holds good, the demand for an intelligent survey of Pragmatism as a whole has been supplied by Mr. D. L. Murray's *Pragmatism* in English, and (more historically and elaborately) by Dr. T. B. Muller's *Kennisleer van het Anglo-Amerikaansch Pragmatisme* in Dutch. Moreover Signor Papini does not even now fulfil his original promise: his book is not systematic and for the most part not new, but composed of reprints of articles he had already published, mostly in the defunct *Leonardo*, between 1903-1911. Nor do the excuses he makes in his interesting preface¹ for disappointing these expectations go far to explain the mystery. He admits indeed, with engaging candour, "undulations of thought, contradictions, *lacunae*, imperfectly developed hints, too daring dreams and too minute analyses," and claims only a certain unity in spite of "changes and repentances of all sorts," but beyond this he makes no attempt to draw up a balance-sheet of the gains and losses of his spiritual development. The reader is simply left to conjecture in a general way that the experiences of Signor Papini's private life are reflected in his papers, and that the order in which they are published *may* mean that the later are more indicative of his present views.

All therefore that a reviewer can be expected to do is to welcome the republication in an accessible form of the ideas which have made Signor Papini a noted figure in the pragmatic controversy, such as the *Uomo-Dio* ideal which so impressed William James in the delightful article in the

¹ It makes however the curious mistake of placing the death of William James in 1908 instead of 1910.

Journal of Philosophy, iii., 13,¹ and the much-quoted description of pragmatism as a 'corridor-philosophy,' which leads to an 'unstiffening' of all theories. As it is impossible to treat the work as the exposition of a systematic doctrine, I proceed to select for comment a few of Signor Papini's most interesting points. To begin with the *Uomo-Dio*, which is as it were the pragmatic counterpart of the intellectualistic ideal of attaining deification by a union (whether mystical or logical) with the Absolute, it is to be noted that it does not really mean more than the aspiration "to obtain a maximum amount of direct power over men and things" (p. 48). As to how the requisite 'omnipotence' (a term Papini uses as loosely as any theologian) is to be obtained, nothing is suggested but an 'art of miracles,' based on spiritual concentration, solitude, silence, chastity and fasting. It had not apparently occurred to Signor Papini either that these traditional devices are exceedingly likely to generate hallucinatory experiences, or that 'miracles' are excluded from the creed of science precisely because they do not (usually) stand the pragmatic test. The scientific method of augmenting the power of man is (so far) the only one which really works and is pragmatically true.

The attempt to define Pragmatism which culminates in the 'corridor' comparison, similarly fails to bring out its scientific affinities. Pragmatism can be called a 'mass of methods,' and compared to a corridor through which men pass on various quests (p. 82), simply because it is the method of science and its logic is the first successful formulation of that method by philosophy.

There is a certain warrant for conceiving the essential function of Pragmatism as an *disirrigidimento*, an unstiffening of theories and beliefs (p. 77) provided that this is not understood as an invitation to loose thinking and a happy-go-lucky procedure. For Pragmatism 'loosens the knees' of the older theories in a perfectly specific way. It is a systematic protest against the uncritical method of dogmatic assertion, which appears to be so congenial to many philosophers. And to insist on testing the truth-claims of such assertions by the value of their consequences, and to demand a meaning from vague and bombastic generalities, is to subject philosophic speculations to a much stiffer examination than they have hitherto been prepared for. Moreover the *severity* of the pragmatic criterion has in point of fact been felt (and resented) by the more stiff-necked dogmatists all the world over. The apparent laxity of admitting non-rational considerations into the theory of knowledge is merely the result of honesty and conscientiousness in recognising all the factors which are always in fact operative in human thinking and have been excluded only by the arrogant hypocrisy of misrepresenting human as 'pure' thought.

The essay on the Will to Believe may be commended for its keen analysis of the relations of belief, action and reality (p. 136). Signor Papini rejects both the doctrines that to *act-as-if* can induce belief and that beliefs can alter reality. He objects to the former that to *act-as-if* already implies a desire to believe, and is no creation of beliefs out of nothing. But this is precisely what James indicated by saying that the Will to Believe operates only in 'live options' which appeal to real 'willingness to act,' and it has always been *denied* that the pragmatic 'making of reality' involves 'creation out of nothing'. To the second doctrine it is objected that "faith alone, unaccompanied by corresponding acts," leads to nothing (p. 139). But it is no part of James's doctrine

¹ But it has, alas, availed so little to arrest "the almost complete blunting of the literary sense" of the American philosophy it contrasted with Papini's.

to dispute this. Surely the genuineness of bare faith without acts is precisely what pragmatism casts a doubt upon, when it insists that beliefs must not be divorced from the acts they issue in. To take the tentative act-as-if without the desire to try a belief, and to conceive the will to believe as unaccompanied by a will to act, is in each case a false abstraction which does not recognise the intrinsic connexion between thought and action, and can mean only a recrudescence of intellectualism. The pragmatist is the least likely of philosophers to repudiate the Platonic dictum, *ὁ συνοπτικός διαλεκτικός*; for he puts an end to the long divorce of thought and action by perceiving that they belong inseparably to each other, because every thought is an act, and can only be understood as such.

F. C. S. SCHILLER.

Il Valore Supremo. By LUIGI VALLI. Genova: A. F. Formiggini, 1913. Pp. 323.

The author of this work discusses values from a positivist standpoint. The supreme value is life itself, for the reasons that it is not a means to anything else, and remains unexplained. Life, however, does not mean that of the individual, which is subordinated to that of posterity. All the other values can be explained, and so are not absolute and improperly ends *per se* ('valori pseudo-proprii'): science discovers their function and disabuses us of the belief in their ultimateness which they have for our (deluded) consciousness. This discovery debilitates them, and gradually destroys also their '*proiezioni*,' i.e. the extensions of a valuation beyond its functional utility.

It does not seem however that any of those positions are convincingly established. Why should the discovery that an apparent end is also a means necessarily diminish its value as an end? Does the man who discovers that he must not only eat because he likes it, but also in order to live, usually cease to enjoy his dinner on this account? Cannot an end have a double function, both as a means and as an end? Why again should it be assumed that the value of an end depends on its remaining a mystery and an inexplicability? That an apparent end should turn out to be mysterious and inexplicable, seems to be a reason, not for acknowledging its supremacy but rather for discarding it. How again is science to guarantee this inexplicability? It can only testify that so far no explanation can be given: but that seems a poor reason for exalting such an end above those that seem intelligible. In short Signor Valli's argument, though it justly lays stress on the biological control of our subjective valuations, seems to conduct to the conclusion that values are about the most irrational aspects of a thoroughly irrational scheme of things. It might be more promising to show that, on the contrary, they pervade and generate all 'rationality'.

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VIII.—PHILOSOPHICAL PERIODICALS.

PHILOSOPHICAL REVIEW. Vol. xxiii., Heft No. 4. **B. H. Bode.** 'The Psychological Doctrine of Focus and Margin.' [Psychology can be saved only by a behaviourism which regards the body and its stimulus as correlative factors or components.] **W. Fite.** 'Pragmatism and Science. —I.' [Kant's humanism was cut short by blind reverence for the Newtonian physics, which meant in his psychology a separation of reason and desire. Pragmatist logic is cut short at instrumentalism, which (since the man of science is the typical absolutist) means an unholy alliance with absolutism.] **A. C. Armstrong.** 'Bergson, Berkeley, and Philosophical Intuition.' [Challenges Bergson's interpretation in *L'intuition Philosophique*; it is wrong to overlook the integral elements of the system.] **Reviews of Books.** [Notices of New Books. Summaries of Articles. Notes.

PSYCHOLOGICAL REVIEW. Vol. xxi., No. 3. **H. Carr.** 'Principles of Selection in Animal Learning.' [Selection depends on the relative recency, frequency and intensity of the successful act, not on pleasure-pain.] **G. van N. Dearborn.** 'Certain further Factors in the Physiology of Euphoria.' [Euphoric coenæsthesia depends largely on nutritional and sympathetic influences from the active intestinal villi, on kinæsthesia proper, and on epicritic (dermal) impulses.] **W. Healy.** 'A Pictorial Completion Test.' [Describes a visual analogue of Ebbinghaus's *Combinationsmethode*. A point of clinical importance is that adult performance, simply scored, may be worse than normal child-performance.] **E. P. Frost.** 'Cannot Psychology Dispense with Consciousness?' [An attempt to express the facts of consciousness, in the sense of awareness, in terms of physiological functioning (nervous arcs).] **W. J. M. A. Maloney.** 'The Mechanism of Mental Processes as Revealed in Reckoning.' [Analysis of errors made in a certain mode of continuous adding (errors of sequence, factorisation, copying, completion). Suppression of digits is an active mental process, inhibiting association and reproduction.] Vol. xxi., No. 4. **W. S. Hunter.** 'The After-Effects of Visual Motion.' [The factors involved are retinal changes (probably after-images), associative processes, and strains in the eye-muscles.] **M. Barrett.** 'A Comparison of the Order of Merit Method and the Method of Paired Comparisons.' [The two methods are equally efficient; the former is preferable as making less demand of time and energy and as assigning its own rank to every member of the series.] **F. L. Wells.** 'The Systematic Observation of the Personality, in its Relation to the Hygiene of Mind.' [Since mental adaptation is the constructive problem of psychology, it is useful to distinguish the essential factors in the adjustment of personality to environment and to mark off healthy from unhealthy reactions. The writer describes five personalities under fourteen rubrics derived (with change and revision) from the Guide of Hoch and Amsden.]

AMERICAN JOURNAL OF PSYCHOLOGY. Vol. xxv., No. 2. **G. S. Hall.**

'A Synthetic Genetic Study of Fear.—1.' [The root-function of mind is affectivity; as soon as there is registration and revival of pain, fear arises. The diathesis is heritable, and the species are very numerous; nearly 150 phobias have been distinguished.—Fear of shock and the *pavor nocturnus* are discussed in detail.] **J. M. Fletcher.** 'An Experimental Study of Stuttering.' [Stuttering manifests itself in irregularities of breathing, vocalisation and articulation; in tonic and clonic conditions of muscles not used in speech; in disturbances of pulse-rate, blood distribution, and psychogalvanic symptoms. All asthenic emotions, moods, attitudes, favour stuttering; distraction of attention from speech and certain forms of excitement relieve it.] **W. B. Cannon.** 'The Interrelations of Emotions as Suggested by Recent Physiological Researches.' [The cranial division of the autonomic system builds up and restores the organic reserves; the sacral serves racial continuity; the thoracic-lumbar preserves the individual. In rage, fear, pain the adrenal glands pour out an increased secretion, which mobilises energy-giving sugar, rapidly dispels the effects of fatigue, and shifts the blood to the vital organs. In view of the uniformity of visceral reaction, the cerebral reverberation must be adjudged more important for psychology.] **J. S. Moore.** 'The Articulation of the Concepts of Normal and Abnormal Psychology.' [A complete science of psychology may be worked out from the concepts of the Complex and of Personality as an integration of complexes.] **Minor Studies from the Psychological Laboratory of Vassar College.** **H. M. Potter, R. Tuttle, M. F. Washburn.**—xxiv. The Speed of Affective Judgments.' [Judgments of indifference are longest, of extreme pleasantness or unpleasantness shortest.] **M. M. Bacon, E. A. Rood, M. F. Washburn.**—xxv. A Study of Affective Contrast.' [Contrast shows itself most strongly in series without knowledge.] **H. Adler, M. Williams, M. F. Washburn.**—xxvi. The Correlation between Accuracy of the Visual Memory After-Image and Control of Visual Imagery.' No correlation under the conditions.] **E. B. Titchener.** 'Laboratory Notes.' [Figures a demonstration of the obliterative picture-pattern of the tiger.] **E. B. Titchener.** 'A Note on *Sensation and Sentiment*.' [Shows that from Malebranche to Rabier pleasure-pain is termed *sensation*.] Book Reviews. Book Notes. **E. J. G. Bradford.** 'Communication.' Neurology. [Durr, Huey, Pierce, Smith.]

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. xi., 1. **M. T. McClure.** 'An Orientation to the Study of Perception.' [Infers from a historical survey that "so long as ideas, or sensations, or mental states are taken to be the immediate objects of knowledge, the relation between sensations and an outside world becomes a problem," and that to avoid artificiality a new point of departure and a new method of approach are needed.] **G. C. Cox.** 'The Case Method in Ethics and Its Critics.' [Reply to Overstreet in x., 17, and Powell in x., 18.]—xi., 2. **H. C. Brown.** 'Value and Potentiality.' [A potentiality being "nothing but the thing itself in relation to some transformation either of itself or of its environment," "value is degree of adequacy of a potentiality to the realisation of the effect by virtue of which it is a potentiality". There is no evidence of values 'absolute' in the sense eternal, but value as a pure abstraction may be absolute provided that this is not asserted of concrete values. Values are not relative to purpose, but purpose is "a reaction of an organism in a world of values whereby some of them are selected or rejected".] **I. Aaronsen.** 'Perception.' [Perception is "an act of adjustment of a living organism that enables it to solve the problems set for it by its environment," "a progressive discovery of values or revelation of reality". It is "not a knowing, not an idea;

never is it a complete overt act," though it *leads* to overt action and to knowledge.] **J. E. Turner.** 'Miss Calkins on Idealism and Realism.' [Cf. ix., 22, xi. 3.] Contains the Report on the Thirteenth Annual Meeting of the American Philosophical Association, by **H. C. Brown**, and the Report of the Committee of Inquiry into this Association and the American Psychological Association on the case of Prof. J. M. Mechlin who was dismissed from Lafayette College (a Presbyterian institution in Alabama) for using as text-books Angell's *Psychology*, Dewey and Tufts's *Ethics*, McDougall's *Social Psychology*, Ames's *Psychology of Religious Experience*, which were not considered 'conservatively Christian' enough, 'according to the standards of the type of Presbyterianism found in the Southern Presbyterian Church and in Princeton Seminary,' though the Professor was 'an ordained Presbyterian minister in good standing'.—xi., 4. 'Report by **M. E. Haggerty** on the Twenty-second Annual Meeting of the American Psychological Association.'—xi., 5. **W. H. Sheldon.** 'An Empirical Definition of Value.' [Seeing that the current accounts of Value are determined by the various views taken in general philosophy, the author tries "to obtain a definition in terms of the specific situations in which values are found," sensual, economic, aesthetic, moral, religious and intellectual, and concludes that "the value of an object consists in its helping to fulfil some tendency already present".] **E. K. Strong.** 'Two Factors which Influence Economical Learning.' [A psychological study stimulated by an endeavour "to determine how different intervals of time between presentations of a firm's advertisements affect the final permanent impression". "Four advertisements seen within a few minutes of each other create an impression 82% superior to that created by but one advertisement." But when they are seen at intervals of a week, the effect is 90% better, while at intervals of a month it falls to 45%. A day's interval is found to give the maximum results.] **W. B. Pitkin.** 'Concepts and Existence.' [Reply to W. T. Bush in x., 25.]—xi., 6. **R. B. Perry.** 'The Definition of Value.' [Thinks there is "something approaching unanimity that value in the generic sense has to do with a certain constant that we may call *bias* or *interest*," but also that "interests cannot be at the same time constitutive and cognitive of value".] **W. B. Cannon.** 'Recent Studies of Bodily Effects of Fear, Rage, and Pain.' [Emotional excitement and painful stimulation produce glycosuria, adrenal secretion restores efficiency after fatigue, adrenin hastens coagulation of the blood, and all these reactions increase efficiency.]—xi., 7.

THE INTERNATIONAL JOURNAL OF ETHICS. Vol. xxiv., No. 3. **C. D. Burns.** 'What is Religious Knowledge?' [Religious knowledge is not different in kind from scientific or philosophical knowledge. It is (1) systematised, but (2) poetically-expressed, knowledge.] **C. W. Super.** 'Ethics as a Science.' [Science has helped the social reformer to deal with such moral problems as poverty, sexual immorality, and war. The more scientific the practical science of Ethics becomes, the more progress it will make.] **A. B. Brown.** 'Intuition.' [Examines the theories of Plato, Aristotle, Spinoza, Hegel, and Bergson, and concludes that intuition is not primitive immediacy, but *σύννοψις* or "contuition".] **C. D. Broad.** 'The Doctrine of Consequences in Ethics.' [Criticises Moore and Russell, and defines an objectively right action as "one such that, if it be done, the total value of the universe will be at least as great as if any other possible alternative had been done by the agent".] **N. C. Mukerji.** 'Idealism and the Conception of Law in Morals.' [The Idealist criticism of Law is vitiated by ignorance of the meaning of character and moral end.] **F. J. Gould.** 'An Ethical Teacher's

American Tour.' Discussion. Book Reviews. Books Received. Announcements.

REVUE DE PHILOSOPHIE. 1^{er} Mai, 1914. **J. Bulliot** et **M. Sérol**. 'La Philosophie et la pensée commune.' [The authors define the attitude to be assumed by philosophy towards (i.) the ideas and language of ordinary life, (ii.) the fundamental principles of common reason. These latter should be accepted in the first instance and made the basis and framework of the philosophical system, but the reflective reason has the right to analyse and criticise them.] **P. Duhem**. 'Le temps et le mouvement selon les Scolastiques (sixième article).' [Theories of Walter Burley, and of John Buridan and his disciples, as to the nature and measurement of time.] **P. Florian**. 'De Bacon à Newton : III.—La Société royale de Londres et les philosophes du xvii^e siècle.' [The Royal Society owed most to the influence of Bacon, who not only awakened the scientific spirit but provided a method and an object in research. Descartes and Gassendi also exercised great influence, the former however as a scientist only and not as a philosopher.] **G. Gondé**. 'Autour des Sciences occultes : Un Congrès dit "de Psychologie expérimentale".' [A criticism of the proceedings of the "Second Congress of Experimental Psychology" held at Paris in 1913.] **J. D.** 'Comment aborder un sujet de dissertation ?' [A scheme of divisions and topics for a dissertation on a philosophical subject.]—1^{er} Juin, 1914. **M. Chossat**. 'Saint Thomas d'Aquin et Siger de Brabant.' [Was the treatise of St. Thomas *De unitate intellectus contra Averroistas* a refutation of the *De anima intellectiva* of Siger? The author decides in the negative. St. Thomas's treatise is a refutation of a previous work of Siger, and the *De anima intellectiva* is Siger's answer to the refutation.] **P. Charles**. 'La métaphysique du Kantisme ; v. L'Analyse.' (Conclusion.) [Kant received from Leibnitz and continued to the end to hold the theory that *analytic* judgments alone are possible to the intellect as such. This is the fundamental error of Kantianism. The *synthetic a priori* judgments and the *schemata* were the result of Kant's reaction against the scepticism into which Hume, starting from the same premisses, was led.] **J. Maritain**. 'L'esprit de la philosophie moderne : I. La réforme cartésienne.' [Descartes gave a rational form to the anti-scholastic attitude which was the origin of the modern philosophies. In his theodicy Descartes separated completely theology and philosophy, and denied any true knowledge of God. His attitude was essentially *modernistic*.] **G. Gondé**. 'Autour des Sciences occultes : Un Congrès dit "de Psychologie expérimentale".' (Seconde article.) [Continuation of the criticism of the proceedings of the "Second Congress of Experimental Psychology".]—1^{er} Juillet, 1914. **J. Bulliot**. 'Jean Buridan et le mouvement de la Terre.' [A chapter from a hitherto unpublished work of Buridan *De Coelo* with a translation. Buridan here decides that the heavens move round the earth, and that the centre of gravity of the earth is its centre of figure.] **M. Chossat**. 'Saint Thomas d'Aquin et Siger de Brabant.' (Second article.) [Siger did not admit the identity of the intellect in all men, but was a "mitigated Averroist". The author also gives further reasons for the opinion that the *De unitate intellectus* of St. Thomas was not a refutation of Siger's *De anima intellectiva*.] **J. Maritain**. 'L'esprit de la philosophie moderne : II. L'indépendance de l'esprit.' [As modern philosophy has broken away from God, so it has broken away from external objects and from the ideal of unity. Descartes was in philosophy, as Luther in religion, the upholder of the liberty of the private judgment. This shown in Descartes' criterion of truth—the "clear idea". As a subjective criterion it renders objective truth inac-

cessible to the mind ; as a personal criterion (like "the private judgment" in Protestantism) it is the cause of the divisions and dissensions of modern philosophy.]—1er Aout, 1914. **P. Duhem.** 'Le temps et le mouvement selon les Scolastiques.' (Septième et dernier article.) [Nicholas Bonet (and with him Gerardus Odonis) maintained that not only space but also time and motion were in reality composed of indivisible parts connected by common extremities. As conceived by the mind, however, space, time, and motion were continuous and indefinitely divisible. With regard to the absolute standard of time, Bonet and Grazadei d'Ascoli appear to have been the only schoolmen who held that this absolute standard had no objective existence, but was a mere mathematical abstraction.] **M. Gossard.** 'La notion péripatéticienne du mouvement et la science de l'énergie.' [The author traces an analogy between the modern idea of physical energy and the Aristotelian concept of motion which was that of *continuous change*. The explanation of the process of motion admitted by the schoolmen and founded upon the coexistence of contrary forms in *gradibus remissis* would not, however, be accepted by modern physicists.] **Dr. L. Pascault.** 'La douleur et le sens de la vie d'après Blanc de Saint-Bonet.' [De Saint-Bonet's solution of the problem of suffering. The natural effects of suffering and labour. The object of life is to afford an opportunity of combat for the free will and to show forth each man's deserts.]

ARCHIVES DE PSYCHOLOGIE. Tome xiv., No. 2. **H. Lelesz.** 'L'orientation d'esprit dans le témoignage.' [Of the five types of observer—descriptive, superficial, intelligent, interpretative, ambitious—the intelligent holds the first, the interpretative the last place.] **C. Odier.** 'A propos d'un cas de contracture hystérique.' [Analysis of case, largely in Freudian terms. Hysteria depends upon a congenital tendency to mental dissociation, realised by some psycho-emotive trauma.] **E. Degallier.** 'Horlogerie et psychologie : plan d'études établi en vue d'une recherche des conditions les plus favorables à l'exercice d'un métier déterminé et à son enseignement.' [Invites the attention of psychologists to the technique of watchmaking.] **Recueil de Faits : Documents et Discussions.** **K. Dunlap.** 'Les mouvements de l'œil et la simultanéité d'impressions disparates périodiques.' [Reply to Michotte regarding the complication experiment.] **G. Berguer.** 'Note sur le langage du rêve.' [A purely verbal mechanism may be at work in dreams : against Freud.] **E. Partos.** 'Analyse d'une erreur scientifique : contribution à la psychologie du prestige.' [Discusses Abderhalden's serum diagnosis of pregnancy.] **Bibliographie. Notes diverses.**

REVUE DE MÉTAPHYSIQUE ET DE MORALE. NOV., 1913. **H. Höffding.** 'Søren Kierkegaard.' [An address on the centenary of a Danish religious philosopher and poet. He emphasised the importance of personality ; divided possible modes of life into discontinuous stages, of which that represented by primitive Christianity is incomparably the highest ; and entered into a controversy with official Christianity for its attempt to reconcile the religious with the lower stages of life.] **E. Goblot.** 'La Relation des Jugements.' [There are no true disjunctive judgments ; what seem to be such are hypothetical. There is no division between judgments of inference and those of relation ; the apparent difference rests on mistaking the true subjects of the latter and forgetting that these can only be determined by considering what question the judgment answers. Universal judgments are really hypothetical and do not assert inferences. They must be distinguished from enumerative judgments of the same form ; these are categorical. The distinction is important for

induction and the syllogism. Necessity involves generality, and generality ultimately rests on necessity; but it is only generality that is important for our reasonings. Affirmative hypotheticals are always universal, negatives ones particular, and *vice versa*.] **C. Radulescu-Motru.** 'La Conscience Transcendentale.' [Kant confuses the psychological identity of the individual consciousness with the mathematical identity of consciousness-in-general. His followers, by developing these two sides, land once more in empiricism or rationalism, each exaggerated by the Copernican revolution. Kant saw the distinction but failed to reconcile the differences. He tells us how consciousness-in-general reaches objective truth, but not what he means by this term, nor how the individual consciousness reaches it. The author dismisses attempts to solve this problem by Lange, Avenarius, Schopenhauer, Nietzsche, and Bergson, on the one hand, and by the Romantics, Hegel, and Durkheim on the other. The former he connects with the Kantian doctrine of schematism in time; the latter with the doctrine of genius in the *Critique of Judgment*. He rejects all these views and rests the solution on the fact that the *individual's* experience is itself fully determined and not fortuitous.] **T. Talayrach.** 'La Philosophie de l'Histoire de Julius Bahnsen.' [An attempt to reconstruct this from his published works, his journal, and an unpublished work called *Individuum und Geschichte*. Bahnsen was a pessimist. His journal contains many striking condemnations of Bismarck's policy, and he saw clearly that the enforced unity of Germany and the successes of the war meant the loss of much that was best in German character.] **Th. Ruysen.** 'La Morale Sexuelle.' [Eminently balanced and sensible. (To be continued.)] **A. Lalande.** 'L'Individualisation de l'Impôt.' [Justice demands that the income tax should be reckoned not merely on the amount of the income, but that regard should be had to the number of persons which the income has to support.] **Reviews of Books and Periodicals, etc.—Jan., 1914.** **É. Boutroux.** 'Religion et Raison.' [Religion only conflicts with reason when the latter is taken solely as what is dealt with by formal logic.] **J. M. Carré.** 'Un Inédit de Fichte.' [A short account of the relations of the Wissenschaftslehre to the Kantian philosophy, written by Fichte for Henry Crabbe Robinson, and lately discovered among the latter's papers. Some information about Robinson's life in Germany is appended.] **X. Léon.** 'Le Socialisme de Fichte.' [An account of *Der Geschlossene Handelstaat*, a work dedicated by Fichte to Struensee, the Prussian Minister, at a time when Prussia was vacillating between Mercantilism and Free-trade. It attacks both; recommends a system of egalitarian State-socialism, and, to ensure its success, demands the abolition of all foreign trade by the suppression of all but token-money within the State. This prohibition is to be preceded by the State finding its natural boundaries, either by war or negotiation. (To be continued.)] **B. Lavergne.** 'La Répartition des Richesses.' [Distribution, as treated by the classical economists, is really a part of Production. The real problems of Distribution do not belong to deductive economics but to social statistics.] **E. de Michélin.** 'Les Problèmes de la Logique selon F. Enriques.' [An account of the views expressed in *Problemi della Scienza*. Science progresses by finding in the real world terms which more and more approximate to the conditions demanded by the laws of pure logic.] **A. Rivaud.** 'Textes inédits de Leibniz publiés par M. Ivan Jagodinsky.' [An account of some writings of Leibniz dating to 1675. They are mainly occupied with the principle of Harmony, with infinity, and with predication. Much of them is Spinozistic in tone, though there is always a fundamental difference.] **Th. Ruysen.** 'La Morale Sexuelle.' [Concluded.] **Reviews of Books and Periodicals, etc.—March, 1914.** **L. Dugas.** 'La Feuille

de Charmelle de Jules Léquier. [Original text, with variants.] **A. Schweitzer.** 'De la Logique générique des Mathématiques.' [Mathematical discovery needs more than mere deduction. A problem involves a conflict which is set at rest by discovering something that mediates between the two sides. Our search for mediators is subject to certain directive ideas, which are not peculiar to mathematics, but take a special form in it. And these can ultimately be reduced to the idea of comparison.] **X. Léon.** 'Le Socialisme de Fichte.' [Conclusion. Very similar views to Fichte's had been put forward in France by the Jacobin Baboeuf; and, though he was executed, the National Convention had to adopt many of his suggestions. Fichte would be aware of this, and therefore persuaded that his theories were immediately practicable. Struensee and his Prussian contemporaries thought otherwise.] **E. Laskine.** 'Les Transformations du Droit au xix^e Siècle.' [Criticises M. Duguit's view that modern legal developments depart further and further from the position of the Code, which rests all rights and obligations on the free choices of individual wills. Duguit's objections can be met by taking volition and freedom in a wider sense than the Code contemplated. (To be continued.)] **G. Lechalas.** 'L'Arc-en-Ciel et les Peintres.' [A sign of the weakness of memory for colour is that rainbows are commonly represented even by good painters with the colours in the wrong order. Certain geometrical properties of rainbows are also ignored by almost all painters.] **S. Ginzberg et L. Couturat.** 'A propos des Propositions particulières.' [A controversy as to the interpretation of 'some,' and the relation of Ginzberg's interpretation to the traditional logic.] **G. Guy-Grand.** 'Politique extérieure et Démocratie.' [An absolute monarchy can doubtless best carry out a foreign policy of force and expansion; but this is not the ethical ideal of a democracy, and therefore its comparative failure to carry it out is no reproach. Still all actual democracies have to recognise the opposite ideals of monarchical nations and act accordingly. And a democracy may desire an antidemocratic foreign policy, which its Ministers must then carry out as best they can.] Reviews of Books, Periodicals, etc.

ZEITSCHRIFT F. PSYCHOLOGIE. Bd. lxxviii., Heft 5 und 6. **R. Liebenberg.** 'Über das Schätzen von Mengen.' [A study, qualitative and quantitative, of 'estimation,' the materials being dots of various colours, sizes and forms, shown in varying numbers and arrangements. Even numbers were preferred by the observers.] **A. Kuehn.** 'Über Einprägung durch Lesen und Rezitieren.' [Experiments with sense and nonsense material, the former both connected and disconnected, show that reciting (i.e., any mode of repeating from memory) is superior to reading because it induces a more thorough and more varied working-over of the material. Except for observers of a strongly motor type, 'pure' reading is practically valueless.] Institut f. angewandte Psychologie.—Bd. lxxix., Heft 1 und 2. **J. Pikler.** 'Empfindung und Vergleich.—II.' [Further explains the writer's theory of the additive nature of the process of comparison, and argues that sensation is not passively conditioned on stimulus but is the free expression of a faculty or tendency.] **E. Bleuler.** 'Psychische Kausalität und Willensakt.' [Psychical energy is identical with nervous energy, and there is no difference of principle between mental and neural causation. Mental reactions (as the act of will) may be explained in terms of inhibition and facilitation, if we assume a system of 'shunting' in the nervous system.] **G. Tichy.** 'Experimentelle Analyse der sog. Beaumaischen Würfel.' [Wundt's explanation holds; but in this complex figure associative factors play their part.] Literaturbericht. **P. Mies.** 'Zur Berichtigung.'

—Bd. lxi., Heft 3 und 4. **G. Rose.** 'Experimentelle Untersuchungen über das topische Gedächtnis.' [Experiments with lamps and illuminated syllables (one of the frames used gave 400 locally different exposures) undertaken to test Müller's hypothesis of a topical memory that is essentially visual but has pronounced motor accompaniments. The writer discusses the effect of grouping, of dark and light surroundings, the parts played by memory of form, by relative and egocentric localisation, etc.] **P. von Liebermann** und **G. Revesz.** 'Die binaurale Tonmischung.' [We have a tonal mixture analogous to colour mixture if (as in certain cases of paracusis) the monaural tones are alike in pitch but different in 'character'.] **V. Benussi.** 'Die Gestaltwahrnehmungen: Bemerkungen zu den gleichnämigen Untersuchungen K. Bühlers, Bd. i.' Besprechungen. **L. von Frankl-Hochwart.** 'Über die Einwirkung der Zirbeldrüsenzerstörung auf die Psyche: zusammenfassende Darstellung.' Literaturbericht.

ARCHIV F. D. GESAMTE PSYCHOLOGIE. Bd. xxxii., Heft 1 und 2. **E. Rignano.** 'Die Entwicklung des Raisonnements.' [Traces, in terms of the author's theory, the passage from concrete animal reasoning through affective and utilitarian to scientific classification, and from intuition to deductive reasoning.] **A. Messer.** 'Husserl's Phänomenologie in ihrem Verhältnis zur Psychologie.—II.' [There is no opposition of principle between the two disciplines.] **A. Berliner.** 'Subjektivität und Objektivität von Sinneseindrücken.' [The two sets of stimuli overlap; the objective extend through an indifference-zone into the field of subjectivity, and conversely. There are degrees of subjectivity and objectivity.] **F. Giese.** 'Das Ich als Komplex in der Psychologie.' [There are three ways of approach to the problem of the psychological self: the doctrine of temperaments and ethology, the doctrine of mental types, the method of correlation. The last is the most promising.] **E. Waiblinger.** 'Beiträge zur Feststellung des Tonfalls in den romanischen Sprachen.' [There are at least forty-six type-forms of melodic movement within the speech-measure.] **Boden.** 'Ein zivilprozessualer Aussageversuch.' [Experimental study, in terms of civil process, of the value of testimony regarding oral contracts.] **A. Messer.** 'Entgegnung.' [Against Pfordten.] **E. Steinhart.** 'Bericht über den I. Kongress für Ästhetik und allgemeine Kunstwissenschaft in Berlin.' Literaturbericht. [Ruederer on Jaensch's *Sprachlaute*, Wilken on Ingenieros' *Psicología biológica*.]

RIVISTA DI FILOSOFIA. Anno v., Fasc. 4, September-October, 1913. **Roberto Ardigo.** 'Lo spirito aspetto specifico culminante dell'energia infunzione nell'organismo animale.' [Ardigo holds, like Spencer, that there is a unity of composition through all the ascending manifestations of consciousness from the most elementary feeling up to the most complicated processes of reasoning. But he is not, like Spencer, an agnostic in the sense of believing that reality must remain for ever unknown. He is a double-aspect ontologist, holding that consciousness and its object constitute two sides of the same everlasting energy. At the same time the very wording of his title seems to introduce the idea of relative values for which the double-aspect theory does not find a place. If mind ranks higher than elementary feeling, is not consciousness in general superior rather than parallel to the mechanical modes of motion?] **Bernardino Varisco.** 'L'individuo e l'uomo.' [According to Varisco individual self-consciousness involves the existence of other intelligences and of a world more or less common to all. By a somewhat summary argument he passes from this fact to the conclusion that if the world of phenomena has not existed from all eternity we must admit the existence

of a super-phenomenal personality on which the world of experience depends. This looks like a return from the impersonal 'Eternal Consciousness' of T. H. Green to the personal God of Berkeley and Ferrier.] **Enrico Morcelli.** 'I limiti della coscienza.' [Science does not pretend to give more than a symbolical representation of reality. But without reaching the essence of things it keeps us better informed about what things are than mere feeling can. Love guided by reason is that on which our happiness depends.] **Michele Losacco.** 'Il concetto fondamentale delle Fenomenologie di Hegel.' [The Phenomenology is a dialectical history of consciousness first in its individual and then in its general development up to the point where subject and object are recognised as essentially identical through the agency of absolute knowledge.] *Note critiche, rassegne, etc.* [Noticeable among these is a long review of an Italian translation of Franz Cumont's book on the Oriental religions in their relation to pagan Rome, the most important section of which is a powerful attack on Croce's view of history.] Fasc. 5, November-December, 1913. **A. Faggi.** 'Del giudizio particolare.' [To say, as Aristotle does, that from the judgment Some As are B it necessarily follows that Some Bs are A is, Faggi holds, to assume without evidence that the coincidence of A and B is incomplete. In other words formal logic as tested by this example is useless without knowledge of things.] **F. Weiss.** 'Note Critiche alla *Filosofia dello Spirito* di Benedetto Croce.' [Continues with increasing asperity the criticism referred to above.] **G. M. Ferrari.** 'L'umanesimo filosofico.' [After a brilliant though rather diffuse account of Pragmatism, Ferrari goes on to describe Humanism, which—following Dr. Schiller, but without acknowledging the debt—he traces back to Protagoras, and describes as a philosophy that accepts and goes beyond the pragmatist principles, summing it up in these words: 'The philosophical problem has no meaning except for human beings striving to comprehend the universe of human experience with the help of the resources of human minds.'] **R. Resta.** 'Concetto d'una pedagogia.' [The art of education is not identified with any particular theory of existence, or of values, or of their combination, but has affinities with all, in so far as it is bound to inculcate the realisation of an ideal.] **A. Marchesini.** 'L'amicizia nella vita e nell'educazione'. [The excellent sentiments expressed in this article fall rather flat for want of a single concrete example. The only practical idea is that children, to learn friendship, should be sent to school, not brought up at home.] **M. B. Zanotti.** 'Saggio di una filosofia dell'Individuazione.' The most remarkable idea in this article is contained in a short foot-note (p. 607) declaring that questions about the principle and end of reality admit of no answer, originating as they do in the mind which reality transcends. *Reviews of Books, etc.*—Anno vi., Fasc. 1, January-February, 1914. **G. Vidari.** 'Esordio.' [Briefly sets forth the object of the Review, which is to supply a common ground without sectarian limitations, where thinkers of different schools may meet for comparison and mutual information.] **A. Faggi.** 'Ancora del giudizio particolare.' [The particular judgments of formal logic serve in reference to material knowledge both as a suggestion pointing the way to universal judgments and as a check on over-hasty generalisation.] **A. Ruesch.** 'Il settimo enigma.' [The seventh riddle of the universe, according to Dubois Reymond's numeration, turns on the question whether man's will is free or determined. The writer concludes for determinism—not, however, on the strength of the law of universal causation, but on psychological grounds.] **A. Tilgher.** 'Lineamenti, etici.' [To understand this essay, the author informs us, it is necessary to have studied various other essays leading up to it, of which he enumerates half-a-dozen as the most

important. But the conclusion printed here savours so much of the mystical German romanticism in fashion a century ago that few will care to plunge into it or into its precursors.] **M. Losacco.** 'Le assumzioni.' [This paper has for its object to introduce the Italian philosophical public to Meinong's inquiries into the psychological character of assumptions.] **M. Zanotti-Bianco.** 'Saggio di una filosofia dell' Individuazione.' [Here again the demand for unrestricted individual liberty reminds one of German romantic philosophy in its post-Fichtean and pre-Hegelian expression.] **P. Caraballese.** 'Il valore e la filosofia.' [A plea for the omniscience of philosophy in the sense of not reserving any theory of values as the particular domain of religious mysticism.] **A. Consorti.** 'Per una interpretazione delle forme curve degli organismi e vegetali.' **A.L.** 'Indifesa della filosofia del diritto.' **A. Gnesotto.** 'Del giudizio particolare.' Recensioni, etc.

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OF

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EDITED BY

PROF. G. F. STOUT,

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